ED 027 674

By-Smaltz, Janet M., Ed. Guides to Special Education in North Dakota. Volume III, Speech and Hearing Services in Public Schools. ---North Dakota State Dept. of Public Instruction, Bismark.

Pub Date 67 Note-131p.

EDRS Price MF-\$0.75 HC-\$6.65

Descriptors Administration, Audiometric Tests, Auditory Evaluation, *Aurally Handicapped, Clinical Diagnosis, Equipment Maintenance, *Exceptional Child Education, Facility Requirements, Health Services, Hearing Aids, Identification, Program Planning, Records (Forms), Scheduling, *Speech Handicapped, Speech Therapists, *Speech Therapy, *State Programs, Teacher Certification, Teaching Methods, Welfare Services

Identifiers-North Dakota

Guidelines are provided for the establishment and maintenance of public school speech and hearing programs. Administrative information covers planning the speech correction program, different types of programs, qualifications and responsibilities of clinicians, facilities for the programs, suggestions for supervisors, and state regulations and responsibilities. Organization of the speech correction program includes screening and evaluation, scheduling, group and individual therapy, parent contacts, and equipment and supplies. The program outline in hearing deals with identification audiometry, goals for the school-age child, periodicity of testing, personnel needs, record keeping, program evaluation, referral criteria, recommended minimum standards of environment and equipment, frequencies to be tested, intensity levels, and maintenance of equipment. Test methodology is described, and information is included on use and maintenance of hearing aids. A final section discusses professional personnel liaison; parent role; health, welfare, and rehabilitation services; speech and hearing programs and schools; and community information projects. Administrative records and clinical forms, standards and information for clinicians, rules for operation and maintenance of equipment, suggestions for teachers and parenis, a 10-item bibliography, and a list of three instructional materials are included. (JB) -

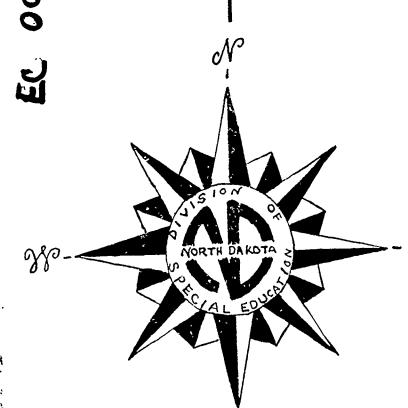


juides To Special Education

In North Dakota-2



III. SPEECH AND HEARING SERVICES IN PUBLIC SCHOOLS



DEPARTMENT OF PUBLIC INSTRUCTION M. F. Peterson, Superintendent BISMARCK, NORTH DAKOTA

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE OFFICE OF EDUCATION

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Guides to Special Education in North Dakota

III. SPEECH AND HEARING SERVICES IN PUBLIC SCHOOLS

DEPARTMENT OF PUBLIC INSTRUCTION M. F. Peterson, Superintendent Bismarck, North Dakota

3,061

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ACKNOWLEDGEMENTS

Following a Special Study Institute in 1965 during which Dr. Ruth B. Irwin, Ohio State University and Dr. Robert Erickson, Western Michigan University discussed "Re-evaluation of Public School Speech Therapy Caseloads in North Dakota", the North Dakota Speech and Hearing Association assigned five separate groups of speech clinicians, in five geographical areas of the state, portions of the state guide for public school speech and hearing programs for evaluation and revision. Each of these five groups has completed its study and made recommendations to the Department of Public Instruction for The material has been carefully revision. edited and assimilated into this revised guide for the development of approved programs for speech and hearing in public schools.

Particular thanks for editorial assistance in the section on hearing goes to Dr. Wayne Staab, University of North Dakota.

Janet M. Smaltz
Director of Special Education
Editor

3/17/67



TABLE OF CONTENTS

SECTION 1 - ADMINISTRATION AND ORGANIZATION		
Planning the Speech Correction Program	•) -	C
SECTION 2 - SPEECH		
Introduction Organizing the Speech Correction Program Speech Correction Procedures.	16 - : 22 - :	15 21 31 32
SECTION 3 - HEARING		
Identification Audiometry Referral Procedures Basic Procedures General Test Methodology Hearing Aids Suggested Readings	33 - 4 41, 43 - 4 50 - 6	444555 555
SECTION 4 - PUBLIC AND PROFESSIONAL RELATIONS		
Professional Personnel Liaison	59, 61 -	60 66 67



Table of Contents (continued)

SECTION 5 - APPENDIX

Speech Clinician's Contract	. 68 - 71
•	•
Speech and Hearing Record	•
Individual Progress Report	
Case History	• 74, 75
Diagnostic Articulation Record	. 76
Individual Speech and Hearing Record	
Summary Sheet	~ ^
Audiometric Evaluation	
Medical Report	
Code of Ethics - ASHA	
Evaluating Professional Growth	• 64 - 67
Speech Clinician's Calendar	. 88
Application for Program Approval	• 90 - 93
Special Education Report (Fall)	• 94
Report on Speech Correction (Final)	• 95 - 99
Reimbursement Claim	. 100
Operating Instructions (Auditory Trainer).	101 - 102
operating instructions (Auditory frame)	102 - 106
Operating Instructions (Geloso)	•105 - 100
Operating Instructions (Maico Audiometer).	.107 - 112
Helps for Teachers and Parents	.113 - 115
Speech Improvement	.116 - 121



SECTION 1

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SECTION 1 - ADMINISTRATION AND ORGANIZATION

PLANNING THE SPEECH CORRECTION PROGRAM

When is Speech Defective?

Speech is said to be defective when it is "so different from that of others that it is difficult to understand, or calls undue attention to itself, or causes the speaker to be maladjusted." (Van Riper, Speech Correction: Principles and Methods, Prentice-Hall, Inc., 1963)

Speech defects are commonly classified as follows:

Language and Articulation Disorders Voice Disorders Arhythmic Disorders

Determining the Need for Speech Correction in the School

Since speech develops over a period of several years in childhood, speech defects are more easily accepted in young children. Unfortunately, many persons who have grown to adolescence and adulthood have speech defects which limit their vocational choices and social participation. For this reason it is important to screen all school-age children to determine the need for a speech correction program in the schools.

1. Statistical data

It has been found that 7% to 10% of the children in public schools in North Dakota have some speech deviation from normal. Not all of these will require intensive speech correction procedures,



1. Statistical data (continued)

but from this group will be selected 4% to 5% who will require such a program. The qualified speech clinician is the person best suited to do this evaluation.

Generally, a total school enrollment of 1500 to 2000 pupils will yield an adequate, continuing caseload for one speech clinician.

2. Teacher Referral

Teacher referral is a less adequate method of determining need. They may not refer children whom they understand, even with difficulty, and refer another child who is having trouble with school work. They may be timid about referring certain children who have high prestige in the classroom or community. They may feel insecure about referring without some kind of measurement to use. For this purpose a booklet "Learn About Speech Defects" is available from the Department of Public Instruction and can be used by the teacher as a referral tool.



ADMINISTRATIVE PATTERNS FOR SPEECH CORRECTION PROGRAMS IN NORTH DAKOTA

- 1) One-district program

- 2) Multi-district program
 3) County program
 4) Summer program
 5) Schedule variation
 6) Individual speech correction
- 7) Specialized caseload

1. One-district Program

Employs one or more apeech clinicians One clinician to 1500 - 2000 pupils enrolled in the school Caseload - 50 to 80

Scheduling - speech correction at least twice weekly for individuals or small groups in all grades and high school Responsibility - to superintendent with shared responsibility in systems with principals in individual

Travel - travel allowance if it is necessary to go to more than one school building

Term - regular school term

State reimbursement - \$2,000.00 per clinician reimbursement for full-time programs from state special education funds, with balance coming from local schools.

2. Multi-district Program

Same as one-district program except that the clinician serves two or more districts which share financial costs. Travel is usually 10¢ per mile and should not be so extensive that a reasonable schedule cannot be maintained.

3. County Program

Employs one or more speech clinicians One clinician to 1500 - 2000 pupils enrolled in the school Caseload - 50 to 80

Scheduling - speech correction at least twile weekly for individuals or small groups in all grades and high school

Responsibility - Clinician is responsible to the county special education board and to the county superintendent who is its executive officer by law. When the clinician is serving a particular school building he is responsible to the principal or superintendent of that building and abides by the rules and regulations of that school.

Travel - Travel agreement should be included in the contract. 10¢ per mile is the usual amount allowed.

Term - The regular school term. The clinician, as other staff members, has all the school privileges as well as the responsibilities pertaining to holidays and attendance. -3-



3. County Programs (continued)

State reimbursement from special education - \$3,000.00 from state special education funds supplemented with county tax funds, or if a county special education board is not paying total cost of the program, supplementary funds may be collected from the cooperating districts.

4. Split schedule Program

Some counties have so large a geographical area to serve and may have difficult travel.

In some counties distances are great between schools and road conditions during certain seasons of the year may make travel very difficult. In such a situation a county board of special education may decide to try a split schedule program. The county will be divided into two travel areas. During half of the school year in fall and the spring for instance, the clinician will serve the area most accessible carrying half the caseload (5) pupils) and seeing them four days weekly. During the remainder of the year the clinician will see the other half of the caseload in the second area on an intensive schedule reserving half day per week for follow-up in the other area.

Variations of this type of scheduling can be made in city schools. It is wise to keep in mind that 18 hours of speech correction work per child each school year is considered a minimum requirement. Many children need and should have more.

5. Summer Program

Employs one or more speech clinicians
One clinician for each 30 - 40 children requiring speech correction.

Scheduling - speech correction at least three times weekly, preferably five times weekly.

Responsibility - Clinician is responsible to the school district, county Superintendent or superintendent sponsoring the program.

Travel - Travel agreement is necessary if more than one school building is used as a speech correction center.

Term - A minimum of six weeks.

State reimbursement - \$75.00 weekly with supplementary funds from sponsoring school districts, county funds or parent fees.

NOTE: The summer program is recommended only as a beginning service or when other full-year programs are not available because of lack of personnel.



6. Individual Speech Correction

In school districts where speech correction is not yet available arrangements can sometimes be made to provide speech correction to a public school child whose parents can transport him to the clinician in another district.

a. A qualified clinician must be available. If he is employed in the school system full-time and the individual child is from another public school district, speech correction must be arranged outside of regular school time.

(If a child from a public school district is enrolled during the regular school day speech correction program in an adjacent public school district, the district providing the speech correction may charge a fee from the other district.)

- b. The speech correction provided to the child outside of the regular school day may be paid for by the board from which the child comes. Payments will be made to the clinician.
- c. This school may be eligible to receive reimbursement for the speech correction so provided. The amount may not exceed \$2.00 per lesson (one-half hour) for not more than four lessons per week. This may be paid only to programs given prior reproval by the Department of Public Instruction
- d. Forms for applying for this service are available from the Department of Public Instruction, Bismarck.
- 7. Specialized Caseload a full-time speech clinician may be employed by a public school to serve a limited number of children (less than 20) who have organically caused speech defects or severely impaired language function. Reimbursement for such a program will be the same as for any other full-time program but the caseload must be approved by the Department of Public Instruction prior to beginning of the program. It is assumed that each child will require intensive speech correction.
- 8. Use of Federal Funds in Special Education Federal Funds are available to local schools for addition of new programs or improved programs under Title I, ESEA, on the basis of the numbers of disadvantaged children who will need such programs. These new or improved programs must meet the same regulations as other approved special education programs in North Dakota.



HAMAR AN EXAMPLE OF A COUNTY SPEECH CORRECTION PLAN
E D D Y C O U N T Y SHEYENNE

ERIC

ENROLLMENT 1200 Needing speech correction . TOTAL SCHOOL No. speech centers

4

Monday - New Rockford rurais at New Rockford Thursday - Hamar Friday - Rurals Weekly Schedule: and Brantford Wed. - Sheyenne Tuesday -

Travel: 10¢ a mile rural children to transportation of Jarents provided to each center centers.

17)

for one full-time clinician working with children from more than one Special Education reimbursement was made from state funds to the amount allowed Each school district was assesses \$1.50 per child enrolled in the school; County Commissioners assisted with amount to cover travel in the county; school district. FINANCING:

BRANTFORD

M

In the following years, first grade children and those newly enrolled or with one child, as indicated. Longer periods of time were allowed where it was not possible to see children oftener than once a week. At the outset all children in the county were given A qualified speech clinician provided therapy for individual children working in small groups are tested, and a periodic re-test of certain grades is conducted annually. speech and hearing tests. SERVICE:

ROCKFORD

NEW

THE SPEECH CLINICIAN

Professional Education Requirements

Speech clinicians are required to have:

- 1) A valid North Dakota First Grade Professional Certificate.
- 2) A Special Education Credential in Speech Correction awarded on completion of the following 30 semester hours of specialized course work, issued by the Department of Public Instruction.
 - a) A total of 6 semester hours of credit distributed in phonetics, anatomy and physiology of the speech mechanism, psychology of speech, voice science, semantics.
 - b) A total of 12 semester hours credit in professional speech correction and speech pathology courses.
 - c) Three semester credits in audiology
 - d) At least 200 clock hours of supervised clinical practicum, representing actual work with major types of speech defects at varying age levels in addition to observation periods, assistance with scheduling routine and other non-corrective activities.
 - e) At least 9 semester hours of electives in allied fields which must include courses in child psychology and mental hygiene.
 - f) Personal speech habits in both voice and diction which meet an acceptable standard, as well as personal characteristics acceptable in a teacher of children.
- 3) Adherence to the Professional Code of Ethics of the American Speech and Hearing Association.



Contracts

The contract between the speech clinician and the employer should include agreements, salary, travel allowances, sick leave, social security or teacher retirement provisions in the same way that these are included for other professional school staff. If the speech correction program is to include children in several school buildings or districts, the contract should include the names of the schools involved and the scheduling agreement, if there is one.

Sample contracts are included in the Appendix.

Professional Responsibilities of the Speech Clinician in the School

- 1. The speech clinician is to be considered a professional member of the school faculty where he serves. His responsibilities should be discussed and defined with each building principal.

 During the time the speech clinician is scheduled in a particular building he is subject to the regulation of that school.
- 2. His time should not be scheduled for substitute teaching,
 hall duty, playground supervision or other classroom-teacher
 responsibilities since his time should be more urgently
 needed for teacher and parent conferences, medical follow-up and
 other referral and coordinating contacts pertinent to the
 speech correction program which he alone can do.



Professional Responsibilities of the Speech Clinician in the School (continued)

3. The speech clinician should not arrive at the school later nor leave earlier than other teachers and professional staff unless there is mutual agreement when unusual travel time is included. There will also be home visits and parent conferences outside of the hours of the school day.



Facilities for the Speech Correction Program

1. The Room

- a. It is essential that in each school building the clinician have adequate work space. The room should be at least moderate in size, uncluttered by other equipment, books, desks, etc. There should be room for a table (24" height) and four or five 13" or 14" chairs and space for four or five people to move about. The room should be free from other uses and closed to traffic. The school office, library, school lunch room, halls or furnace rooms are not considered acceptable.
- b. Adequate light, heat and ventilation
- c. Sound absorbing wall and ceiling surfaces should be added. Insulation and carpeting should be included in planning such facilities or in remodelling.
- d. Comfortable straight chairs, a table, shelves, cupboards and other storage space for books and equipment. A low table with small chairs and a taller table with standard size chairs are both needed.
- e. A bulletin board, a chalk board, a wall mirror are useful.
- f. A small side table should be provided where the tape recorder and audiometer may be kept ready for use.
- g. A file which can be locked should be available in each school for the exclusive use of the speech clinician.

2. The Equipment

a. A pure-tone audiometer and a tape recorder may be provided to full-time speech correction programs on loan from the Department of Public Instruction.



2. Equipment (continued)

- b. A table model hearing amplifier for use with children with hearing losses may also be requested for loan from the Department of Public Instruction.
- c. An annual budget of \$50.00 to \$100.00 should be provided for purchase of books and supplies.
- d. An additional annual budget of \$75.00 for repair and recalibration of the equipment should be provided.
- e. A typewriter, desk, and a telephone should be accessible to the speech clinician throughout the year. Some clerical help should be provided at end of term for reports and letters to parents.



Suggestions to the Superintendent for Getting the Speech Correction Program off to a Good Start

- 1. Arrange for early newspaper coverage of new programs in the school.
- 2. Provide opportunity for the speech clinician to talk to teachers at group meetings early in the school year.
- 3. Make the speech clinician feel a part of the total school faculty.
- 4. Require a schedule of the speech clinician's program early in the year.
- 5. Require individual records for each child in the speech correction program and see that they are a part of the child's cumulative record.
- 6. Visit the speech correction program whenever possible.
- 7. Require copies of the mid-year and final reports prepared by the clinician for the state Department of Public Instruction.
- 8. Request approval prior to the beginning of each school year from the Department of Public Instruction and request reimbursement for approved special education funds promptly at the end of the school year.



THE STATE DEPARTMENT OF PUBLIC INSTRUCTION - REGULATIONS FOR THE SPEECH CORRECTION PROGRAM

- 1. Speech clinicians must have a <u>special education credential in</u>
 speech correction listed earlier in this section.
- 2. Prior approval for a program is necessary so that state funds may be set aside for reimbursement.
- 3. Program financed with local or federal funds must meet identical standards as to caseload, speech clinician's qualifications, pupil eligibility, facilities and other program detail.
- 4. Reports are required in December and in May. Sample copies are in the Appendix.

Other Responsibilities of the State Department of Public Instruction for Special Education

To give consultation to school boards and administrators in planning services and to speech clinicians in their programs.

Request service directly from Director of Special Education, Department of Public Instruction, Bismarck.

2. To reimburse approved local programs from special education funds to the amount approved.

At the completion of the program or at mid-year on full-time speech correction programs, the Department of Public Instruction will make reimbursement on receipt of the reimbursement claim illustrated on the reimbursement claim form. A copy of which is in the



Other Responsibilities of the State Department of Public Instruction for Special Education (continued)

Appendix. A supply of forms may be requested from Director of Special Education, Department of Public Instruction, Bismarck.

3. To report to the people of North Dakota on the expenditure of funds and the development of programs to serve exceptional children.

Annual reports are available to any interested person.

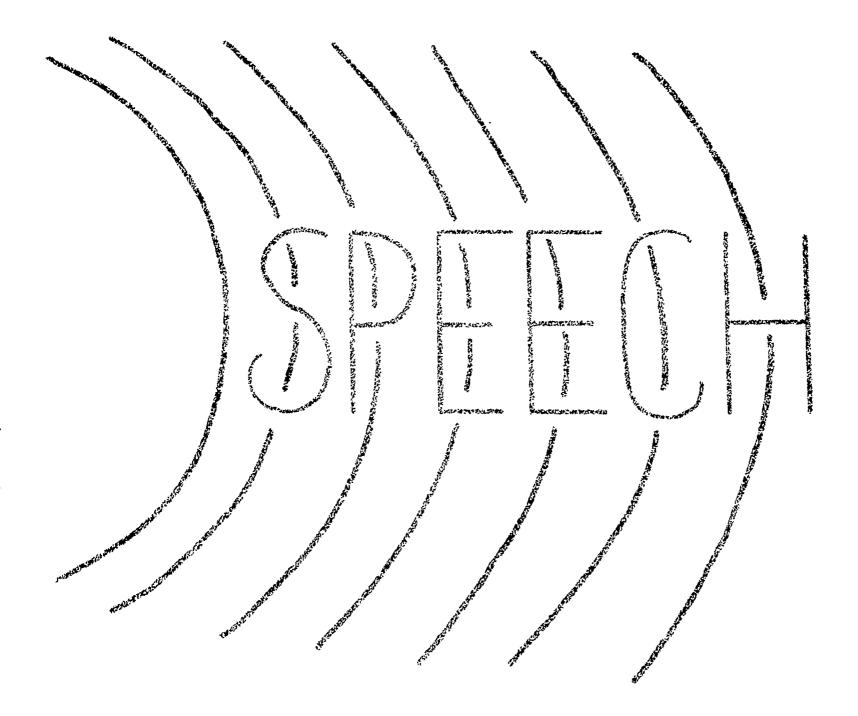
Informal reports and summaries of services are made

periodically in the press and in educational and

parent publications.



SECTION 2



ERIC Full Text Provided by ERIC

Introduction

Speech correction in the public schools developed thirty-five or more years ago as a means of reaching children with speech deviations at a time when their developing patterns were most flexible and at a place wher the children were most accessible for frequent training. The speech clinician was prepare to help children overcome faulty speech patterns and to develop acceptable ones. During the intervening years much research and experimentation has refined the methods, restudied critical areas and developed a body of professional information which has improved the techniques used in such clinical settings in the public school.

There is a controversy within the professional organization for speech and hearing clinicians which may have marked effect on public school speech correction programs as they are known today. Just what will evolve from this internal friction is uncertain. There continue to be children in the public school, however, who need help to overcome speech defects. These children, whose counterparts were in the 1930's the original motivators of the whole program, are accessible in the schools and are ready for help. There seems to be no doubt that they should be served. The crux of the professional argument seems centered first, around case selection and second, around the appropriateness of the speech correction methods used in the schools. Criticism has often been justified and improvement in both areas is a challenge for every speech clinician.

In the light of research studies it is apparent that better evaluation techniques and more careful selection of cases reduce caseloads and free time for more intensive work with children with the most serious speech disorders. Planning the speech correction program on the basis of more adequate diagnosis will alter the tendency to treat the symptom (the sound substitution) rather than the defect itself (for example, delayed language development). Some clinicians have seen the new approach as a discrediting of the whole of their work. This is not the intent. It is rather a mandate to look more carefully into etiology and to make certain that symptoms alone do not determine whether or not the child is included in the caseload.

There are many diagnostic tools for the speech clinician's use today which were not available even a few years ago - measurement of the child against norms for his own age and sex, predictive and prognostic testing, to mention only two. Many new materials are available and so much research is reported in the journals that it is increasingly apparent that the requirement of graduate training will need to be considered as minimum preparation for North Dakota school speech clinicians soon. Speech correction was the forerunner of all special education programs in North Lakota. It can continue to be a model in excellence and service.



SECTION 2

SPEECH

ORGANIZING THE SPEECH CORRECTION PROGRAM

Suggested Screening Plans

- 1. Screen the total school population the first year and screen the first grade and all pupils new to the school each subsequent year. It should be noted that even this program would not be infallable, and the clinician would need to depend upon the classroom teacher to be aware of the development of a speech problem (stuttering or a voice problem) after the child has once been screened out of the speech correction program.
- 2. Screen all children in the lower grade levels (perhaps grades 1, 2 and 3) and test children referred by teachers in grade levels beyond these grades. In subsequent years, children in grade one and all new children might be tested.
- 3. Screen all second grade children and take referrals only from first grade. Least desirable, test children referred by the class-room teacher the first year, following with screening in grade one the following year, etc.



Suggested Screening Plans (continued)

This plan would be followed only where the ratio of speech clinicians to school population would not permit immediate total screening.

Caseload - The caseload for one clinician on a full-time program should be between 50 and 80 children depending on the types of cases, number of centers, number of schools served, travelling necessary, and the grouping of cases which may be feasible. (See also page 3, 4, 22).

Scheduling - Each child should be assigned a period of time preferably three times each week, when he will receive speech correction individually or in a group of two or three.

1. In split-schedule programs: When the county is large or roads in a part of the area are not dependable in winter, the area may be divided so that half of the caseload is carried during the fall and spring weeks and half is carried during the winter.

It is recommended that in such a program 1) a period of at least fourteen weeks be set aside for each area 2) each child receive speech correction at least twice and preferably three times weekly for a total of eighteen hours during the school year, minimum per child.

Scheduling (continued)

- 2. In straight-schedule programs: In most speech correction programs the clinician will see the children twice each week over a thirty-six week school year. Here, too, a period of eighteen hours for the school year will be the minimum per child.
- 3. These suggestions are meant to be merely guides to planning. Where the child needs more time the clinician should make every effort to schedule it.

 Other children may not need as much, or may benefit from working in small groups.
- working on these two types of scheduling patterns seems to indicate that the split-schedule pattern is as effective for all but the children with the most severe speech defects. Before setting up such a program the clinician should discuss the plan thoroughly with local school administrators and have the approval of the Director of Special Education.
- 5. When possible schedule so that the children in lower grades do not miss essential periods in the regular classroom, such as reading.
- 6. High school students may benefit more from one thirtyminute period than two fifteen minute periods and it
 may be much easier to schedule them this way.



Scheduling (continued)

- 7. In general, minimum time should be considered thirty minutes per week, in the regular program.
- 8. Provide each school administrator, principal and teacher with a schedule of your work, children included, time for each, etc. as soon as possible.
- 9. Whenever possible one-half day of the clinician's weekly schedule should be set aside for parent conferences, testing, record keeping and coordination with doctors, welfare workers, etc. This time should be accounted for in reporting and the administrator should be kept informed about the clinicians activities during this time. It is not "free time".

Group and Individual Speech Correction

- 1. Sizes of groups may be two to five children.
- 2. Use groups only when real value for the child can result.
- 3. Most children with persistent speech defects will need individual time in addition to group work.

 If group work deteriorates to game-playing with much waiting for turns and shuffling in discontent, it had better be discontinued as a speech correction setting.



Group and Individual Speech Correction (continued)

- 4. With groups of two or three children each child can receive individual attention and some motivation from the others in the group.
- 5. Groups of stutterers may include larger numbers and since the age average of the group will be higher the effectiveness of this approach may be excellent.

Gaining the cooperation of parents, the school and the community

The school administrator may feel that his community will readily accept a full-time speech correction program as a part of the regular school curriculum, or he may feel that special preparation of the parents and teachers is needed. Teachers should be contacted prior to the setting up of a program and asked to make referrals or to discuss the need. Many teachers are so unaware of the speech defects of children that they may unconsciously fail to support the program if interpretation is not given early.

A speech clinician can be of much help to the classroom teacher in providing more specific information about
the individual children with whom she works, but the bulk
of the assistance will go directly to the child. Concerned
teachers will welcome the individual aid to children in
their rooms.



Gaining the cooperation of parents, the school and the community (continued)

Parents may accept the operation of the school and its curriculum without question, and sometimes without interest. In other instances, they may resent adding a new program and the school administrator will take opportunity to inform the community well in advance of new programs being developed. The purpose of the speech correction program may be discussed at service clubs or parent-teacher groups or with individual parents. Much of the detailed interpretation of the program to individual parents can wait for the full-time clinician, but the readiness of the community is important.

The Public Health Nurse may be helpful in noting the need for speech correction as she makes school visits. A speaker at PTA or Homemakers, pointing up the need for special education in the school, may also be helpful.

SPEECH CORRECTION PROCEDURES

SPEECH EVALUATION - There are three steps to identification of children in need of enrollment in the speech correction program.

The depth of study will vary with each child's problem and will continue throughout the time that the child is given speech correction. It is important to remember that until the nature of the speech defect is known as fully as possible it is not likely that speech correction methods can do more than brush the surface of the symptoms. Many so-called "functional articulation defects" can be understood and treated if proper diagnostic procedures are carried out. Several speech correction periods may need to be set aside for diagnosis with periodic rechecking from time to time, as a part of the regular speech correction schedule.

The three steps to identification of children in need of speech correction are: 1) Screening 2) Appraisal of the Speech Defect
3) Continuing Diagnosis

1. Screening

The clinician should use a quick-screening device which will differentiate between the approximately 90% of children who have normal speech and the 6.5% to 10% who may have speech defects.

a) Articulation Screening Devices - A sentence seem as
"This little girl thinks the cowboys in the television set are real" or any other which includes the critical

sounds in connected speech will adequately screen articulation.

Count to 13.

Naming colors; giving name, address, and telephone number.

Any of these or other samples of connected, informal speech which give the clinician an opportunity to hear all sounds.

- b) Voice quality Throughout the articulation testing being conscious of voice quality and making note of any unusual breathiness, hoarseness, volume or pitch will constitute a voice quality check.
- c) Fluency to test fluency be attentive also to

 the responses given during the articulation test. When

 there is any question of non-fluency, or if you have had

 a referral from a teacher, check this child for further

 evaluation at a more leisurely time.
- 2. Appraisal of the Speech Defect Having eliminated from further consideration those children with normal speech, the clinician will proceed to find out as much as possible about those children with speech possible methods of helping



each child to correct the defect. It is well to remember here that where one child's defective r sound may be due to normal immaturity another child's defective r sound may be a manifestation of brain injury. Methods of treating these two children may vary greatly. The clinician will need to know much about both children to plan each speech correction program most effectively.

- Teeth occlusion, spacing
 Palate width, length, height, velar activity
 Pharynx symmetry, extraneous tissue, action,
 breathing pattern
 Lips mobility, symmetry in movement
 Laryngeal function voice qual_cy, loudness, pitch
 Breathing support of voice pattern
 Tongue size, mobility, controlled movement
- b) Acquire medical reports, when pertinent medical reports, orthopedic, laryngeal, otological, pediatric ophthalmological, cleft palate team, family physician, other.
- Evaluate articulation Use the Templin-Darley <u>Test of</u>

 <u>Articulation</u> or any normative test This will aid in

 identifying the child's defective sounds but will also

 tell the clinician whether or not the child's speech

 is within normal limits for his age and sex.

- d) Auditory discrimination and auditory memory span Use
 Wepman's <u>Auditory Discrimination Test</u> or other of this
 kind as described in Testing Speech Sound Discrimination,
 page 97, <u>Diagnostic Methods in Speech Pathology</u>, Johnson,
 Darley, Spriestersbach. Harper and Row, New York, 1963.
- e) Evaluating language development. the clinician will want to be familiar with the procedures for obtaining samples of language from children for research purposes as described in Johnson, Darley and Spriestersbach, Diagnostic Methods in Speech

 Pathology and the methods of comparing these samples with samples of normal speech. Not in all cases would one employ this detailed method, but it is useful and helpful to know the limitations of the child's language. If a child has need of language development procedures these should certainly precede any attempt to correct articulation defects.
- f) Parent Interview the clinician will need to know the home and the parents of the children with whom he works. This is an important part of the information for appraisal of the child's problem and for planning of the speech correction program for him.

g) Other information - It may be helpful and very important to know others who are concerned and may have been working with the child for reasons other than speech.

These might include the public health nurse, the county welfare personnel, juvenile commissioner, special class teacher or others.

3. Continuing diagnosis

- a) McDonald's <u>Deep Test of Articulation</u>
 Hejna, <u>Developmental Articulation Test</u>
- 4. Evaluating general speech adequacy.

A synthesis of the above information and the auxiliary reports will be necessary in order to evaluate the speech of the child.

Where a relatively uncomplicated speech defect is involved synthesis will be simple. In some cases it may be necessary to confer with other members of the medical, social and educational team in order to see the speech problem clearly and to plan a program of therapy which will be effective.

Indication of neurological disease, aphasia or other symptoms of brain damage may alter planning for therapy.



- 5. Speech Correction Methods
 - a) Speech correction methods will vary with the type of defect, age of the child, and the training of the clinician. No attempt will be made to discuss in detail methods of speech correction here.
 - b) Speech improvement in the classroom is not considered a part of the regular speech correction case load. Although it is recognized as an important part of the classroom work it is felt that the speech clinician can best be of service in this area by helping the classroom teacher to carry out this function more effectively. Only one hour per week of the speech clinicians time may be used in this manner.
 - c) Daily lesson plans will be necessary. Whether they are written in detail or consist simply of notes made at the end of the previous session suggesting a beginning for the next, will depend on the clinician.

Ordinarily use of the same game for all the children on the schedule without variation is not good planning. Having children read aloud throughout the entire therapy session is also inadequate no matter at what stage of improvement a child may be. Originality and ability to adapt simple, uncomplicated devices into motivation for speech practice will show results.



- d) Progress notes should be made every day. Reports to parents and final reports based on daily progress notes are not so difficult to write and have more meaning for everyone. Log sheets for use each day may take care of both lesson planning and reporting.
- e) Games should be used but they should be simple and have a logical and honest speech effort involved.

 If both the child and the clinician have to struggle to remember where the speech activity enters in, that game isn't worthwhile as a speech correction device.
- f) Parent conferences are important. Clear with your school administrator immediately. He may want you to have parent conferences at the outset or he may not. It is not necessary to get permission to enroll children in speech correction if it is an accepted part of the school program.

As soon as you can, meet the child's parents. Let them know you are interested in their child, not just in his speech. Report to them informally through the year when you see them. When the child is ready for some carry-over into the home situation, give them enough information so that they can do their part effectively.



Speech Correction Procedures (continued)

Make a report of your comments and recommendation to the parents at the end of the year or at the completion of the speech correction program a part of the final report.

6. Equipment and Supplies

Below are two suggested lists of equipment and supplies needed by speech clinicians. Your situation may require some from each list.

a) The clinician who had the assignment of listing "Materials Necessary for the Itinerant Speech Therapist" wrote: "When I started to write down on paper what was essential, it seemed that a person could go empty-handed and still do speech correction if one's brain could stay agile enough."

True enough! And this should encourage us to keep our paraphenalia practical and useful.

The written list submitted is as follows:

- 1. Tests and record blanks.
- 2. File folders and records on each child and his program to date.
- 3. Three good speech motivation games-mostly speech with just enough game to add interest. These can be changed weekly or as the need arises. The three should appeal to different age levels.
- 4. Tissues, tongue depressors, finger cots and cocoa butter if you need them.
- 5. Manipulative toys two or three trucks, puppets, or a bean bag, also a box of small varied toys all dumped together for quick interest games.
- 6. A small blackboard or magic writer if there isn't one in your room.
- 7. A book of large pictures from which you may select "talk about" material at will. These may be magazine pictures on construction paper.



Speech Correction Procedures (continued)

- 8. Practice sheets or "homework" materials if you use this as a means of carry-over at home. This will be specifically planned for each child's need, where used.
- 9. A book like "Better Speech and Better Reading" for <u>quick</u> word lists so you won't waste the student's time dreaming up words.
- 10. A notebook with your notes on the preceding lesson and response and your lesson plan for this session.
- 11. A strong back and a sense of humor.
- b) This list was compiled by Bell and Pross and reported in the Journal of Speech and Hearing Disorders, Dec. 1952.

Some items may not apply since it includes A) tools for preliminary examination, B) minimum materials for children of all ages and C) some supplies for working with adults.

- 1. Tests of mental maturity. Suggests California Short Form Tests of Mental Maturity and others.
- 2. Minnesota Multiphasic Personality Inventory.

 (Better have training in using these tests before attempting to employ them.)
- 3. One set of articulation test cards.
- 4. Sentences for articulation examination (They suggest two copies of Fairbanks <u>Voice and Articulation</u>
 <u>Drillbook</u>)
- 5. Several copies of an articulation check sheet.
- 6. Two identical copies of a popular magazine, such as Readers Digest.
- 7. Several copies of the voice usage check sheet.
- 8. An informal speech and sound discrimination test, copies mounted on cardboard.

A simple test may be constructed by prefixing the high frequency sounds to the vowel a (ah).



Speech Correction Procedures (continued)

Twenty four such pairs will suffice for the test. The clinician then stands about ten feet behind the child, and with average intensity promounces each pair of sounds. The child then judges the pair as "same" or "different" sounds. If a considerable number of responses are in error further evaluation is necessary. (Wepman's Auditory Discrimination Test).

- An auditory memory span test.
 (See West, Ansberry and Carr)
- 10. Several wooden tongue depressors
- 11. A pocket flashlight
- 12. A jar of stick candy for tongue activity examinations of the very young.
- 13. An adequate supply of paper and pencils.
- 14. A set of color crayons.
- 15. Two small mirrors.
- 16. Several copies of Johnson's "An Open Letter to the Mother of a Stuttering Child".
- 17. A large candle and a package of matches.
 (Better not in N. D. its a fire hazard)
- 18. A small package of cleansing tissues
- 19. A small pair of scissors.
- 20. Story pictures, 8 x 10, mounted on cards to use for conversation.
- 21. Several copies of a summary case history form.
- 22. Several copies of a stuttering case history.
- 23. Carry it all in a manila folder or envelope.

Perhaps the clinicians in North Dakota have as much variation in their bag of tricks as these two samples. Certain items seem standard. The second list seems to contain more test items and the first list more therapy items.

Why not make your own list?



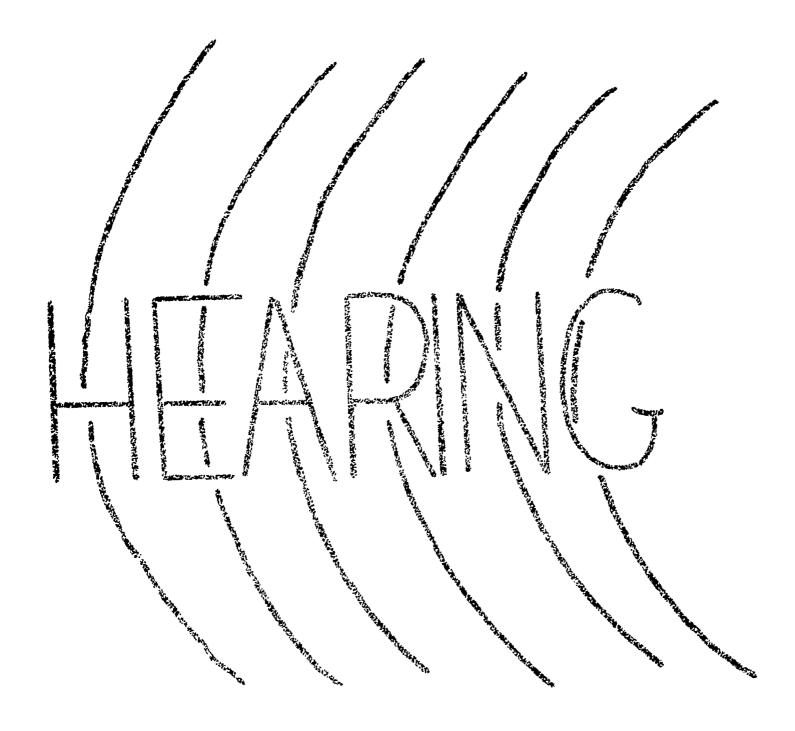
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SECTION 3





SECTION 3 - HEARING

IDENTIFICATION AUDIOMETRY

Definition

Identification audiometry refers to the application of any of a variety of hearing testing procedures to persons of any age for the purpose of identifying those individuals with hearing sensitivity less than that generally defined as within normal limits.

Specific Goals for the School-Age Child

To locate children who have even minimal hearing problems so that they can be referred for medical treatment of any active ear conditions discovered to be present and so that remedial educational procedures can be instituted at the earliest possible date. Programs should be designed to identify not only children with chronic disability but also children who have difficulty during certain times of the year or under certain conditions.



IMPLEMENTING THE PROGRAM

Periodicity of Testing

The periodicity of testing is full of many compromises. Perhaps the the most reasonable compromise is dictated by two considerations:

(1) detection of hearing loss is particularly important in the younger part of the school-age population; if a child fails an early screening test, there is reasonable probability that he will fail subsequent tests; (2) some children constitute special referrals for hearing testing outside of the routine periodicity of tests.

In newly-established programs an effort should be made to test all of the children during the first school year. After this an adequate program is attentive to possible hearing problems in the early school years. Less frequent testing can be planned in subsequent school years, but no child should experience more than a three-year interval between tests from grace 4 through 8. However, more important than scheduling hearing tests to certain grades each year is to insure that no child fails to have his hearing tested at least every two or three years, Accounting, then, should be by child rather than by grade.

The time of year should be considered when conducting an identification audiometric program because some findings indicate that there are important differences between test results at different times of the year. Ideally a child should not have his hearing tested at the same season on successive hearing tests.



Periodicity of Testing (continued)

The administrator of a program might want to consolidate his hearing testing personnel so that routine hearing testing could be accomplished in the briefest possible time. This would allow one to accomplish the total identification program within a matter of weeks or months rather than stretch it out over the entire year.

In addition to the routine periodicity discussed above, an adequate program should include opportunity for immediate testing of the following types of children.

- 1. All pupils who are new to the individual school or to the school district
- 2. Pupils discovered by previous tests to have a hearing impairment
- 3. Children with delayed or defective speech
- 4. Pupils returning to school after a serious illness
- 5. Pupils enrolled in adjustment or remedial classes or programs.
- 6. Pupils who appear to be retarded
- 7. Pupils having emotional or behavioral problems.
- 8. Pupils referred by the classroom teacher for hearing testing for any reason.



Personnel

The success of the entire hearing conservation program rests upon the validity of the hearing measurements done in the first two stages, and this validity rests importantly upon the competence of the personnel doing the testing. Efforts should continually be made, then, to help them maintain high standards of performance and to provide expert supervision to insure the validity of their results.

Identification audiometry with school-age children usually requires personnel at two levels, supervisory and technical. It is conceivable that in some programs one individual will be called upon to perform both levels.

Supervisory

The supervisory position has the responsibility for selecting the most appropriate procedures for testing the particular population to be studied; selecting, training, and supervising audiometrists; referring certain children for more complex audiological study; supervising equipment calibration; discussing test results with otologists; follow-up on referrals; and in general carrying out the entire sub-program of identification audiometry.

An individual in this position should be well-schooled in hearing and hearing testing.



Technical

At the technical level are audiometrists capable of performing screening tests. If possible these individuals should have at least one college-level course in audiometry, including supervised practice in testing. More detailed academic training than this is certainly desirable but in some cases even less training may have to be accepted if enough personnel are to be available to man a program.

Volunteer Personnel

Volunteer personnel (housewives, retired school teachers, etc.) who are intelligent, highly motivated to do this sort of service, tactful, insightful in observing children's behavior, and capable of working easily with children as well as amenable to suggestions of the supervisor, may be selected and trained. If such selection is done with discretion, problems of frequent turnover of personnel may be obviated. Where such persons are employed, administrative procedures should be set up and maintained to see that they are prevented from making evaluations and decisions which they are not competent to make; they should be prevented from doing more than the technical level work.

In training volunteer personnel one should plan a meeting for practice with the audiometer. Allow time for actual practice and for asking questions. One can also review the importance of the hearing conservation program.

Choose enough persons so that it will not become a burden on one or two. Most often half-day shifts are best.



Records

Records of hearing testing through the school-age years should be made a part of the child's general health record. Space should be provided for recording information from a series of audiograms over the school years, with the dates of the tests, the recommendations, and the follow-up.

Such records should be kept as long as is reasonable.

Some school systems, having limited storage space, keep the records no longer than they are required to keep them, usually three years after the child's graduation from school. When records are maintained by state health departments, they should be kept for a period of time consistent with their requirements.

It seem obvious that if current hearing test records are to be maximally useful, they should be available to medical and educational personnel as well as to parents. They should be used in the planning of educational programs as well as in programs of health. The school and public health nurse, physician, and school and community speech clinicians should all have the opportunity to scrutinize these records in connection with their various programs.



Program Evaluation

Administrators of programs of identification audiometry will naturally be concerned as to whether the expenditure in terms of personnel, time, and money is warranted and whether the program is yielding the desired results. Only by constant scrutiny of the results of on-going programs can weaknesses be preceived, corrective steps be taken, and maximal usefulness be derived.

One way in which such a continuing evaluation can be made is by a comparison of the results emerging from the various stages of the process. Several steps are involved: first, a validation of the first screening test by comparison of it with the results of the second-stage threshold examination.

A further validation of the results of the first two stages is provided in the third-stage processing of the results by a professionally capable person in the field of otology, who can state on what basis they made a decision for further referral or not; a third validation is provided by the final clinical report made by the otologist who accomplishes the comprehensive otological examination. Careful analysis of the information yielded by this succession of tests indicated whether an efficient program of preventive medicine, is being carried out.



Program Evaluation (continued)

There is another kind of evaluation which the administrator may want to make. The total number of audiograms produced in either the first or the second stage or both can be translated into a distribution of hearing losses. If the distribution deviates substantially from the distribution that one expects from a normal population, the administrator will be interested in examining the testing environment, the calibration of audiometers, and the procedures used by individual testers.



REFERRAL PROCEDURES

The program of hearing testing should provide for adequate medical consultation. Certainly the final steps in the appraisal and management of individuals identified as probably having hearing impairment should be in the hands of medical personnel most competent to give the children the care they need. An otological examination of such children is not just a desirable feature which hopefully can be arranged but is a requirement if the program is to be effective.

Efforts should obviously be made to avoid referring for complete audiological and otological work-ups large numbers of children who turn out to have no medically or educationally significant hearing loss. Educators and physicians alike, however, agree that as a matter of general principle it is better to err on the side of over-referral than it is to take a chance with under-referral and thus neglect to secure necessary medical treatment for children who need it.

When it has been determined that a child has a significant hearing loss as a result of the sequence of referrals described above and when necessary medical and surgical treatment and follow-up have been provided, there is one further important step to be taken. The audiological and medical findings of the otologist must be conveyed to the parents and to other persons who are



Referral Procedure (continued)

particularly concerned with the management of the child. The special education supervisor, the speech clinician, and the classroom teacher must be apprised of the child's needs and encouraged to meet them as comprehensively as possible.

Appropriate entry should be made in the child's school health record so that a continuing program of care can be insured.

A report, in the form of an audiogram, should be made available for parents to take to the physician or otologist for purposes of comparison.

If there is indication of financial need or reluctance on the part of parents in obtaining otological or other medical attention some agency or organization should be available to assist. A referral to the Public Health Nurse or to the County Welfare Office may be helpful.

A current listing of all otologists in the state should be in the hands of every speech clinician and is made available periodically by the state Department of Public Instruction, Bismarck.

BASIC PROCEDURES

Environment

It is useless to carry out the recommended identification audiometric procedures unless the results obtained can be assumed to be valid. Their reliability depends upon three important aspects: the environment in which the testing is done, the equipment used, and the personnel operating the equipment. If there is a breakdown anywhere, the results of the program become meaningless.

If the noise level is too high, audiometer test sounds will be masked, and a hearing loss will be reported, even in subjects with normal hearing. No amount of skill on the part of the audiometrist or cooperation on the part of the subject will eliminate this source of error. Consequently, obtaining adequate quiet is not a matter of convenience or feasibility -it is a necessity if meaningful hearing tests are to be made.

There are few locations which, without modification, are quiet enough for audiometry. Useful space should be located as far away as possible from heating and other mechanical equipment, the music room, the cafeteria, rest rooms and other sections where student traffic and regularly scheduled activities can be expected to induce high masking levels. Select the most quiet and secluded room in the school (often in the basement). It need not be large. Room for three children and the test administrator and the equipment will be adequate. If a quiet room is not available without curtailment of recesses, etc., then ask that changes in school scheduling and classes be made during the testing days.



Choice of Equipment

Audiometers may be responsible for the erronous identification of apparent hearing losses. To many users of audiometric equipment the instruments are very impressive and seem to imply high reliability. In actuality, many audiometers are relatively unstable and much care must be exerted in their selection and maintenance.

The audiometer to be used for the first stage screening audiometry should meet the requirements established by the American Standards Association for Limited Frequency Audiometers. This equipment allows for the testing by air-conduction of five or six frequencies with an output up to 80 or 90 db. It need not provide for masking or for bone-conduction testing.

The audiometer to be used in the second stage for the obtaining of the threshold audiogram should meet the requirements established by the American Standards Association for Diagnostic Audiometers.

The equipment purchased for individual audiometry should include headsets with two earphones so as to reduce the masking effect of ambient noise. Attention should be given to the size of the earphones used with individual children. Especially with the school-age group heads and ears vary greatly in shape and size, and some obtained differences in hearing may be attributed to differences in the fit of earphones. Headbands should provide pressure adequate to hold cushions tightly against the head; headbands providing more degrees of freedom in all directions are to be preferred.

Choice of Equipment (continued)

Purchasers of equipment will also be interested in the simplicity of design of the equipment; the smoothness of function of the controls, the durability of the chassis, and the convenience of placement of the dials and control levers.

In the testing room some useful equipment will consist of a small table and small chairs, tissues, a piece of sponge rubber to adjust the headphones on very small heads, pencils, extra paper, audiograms, and an extension cord.



Frequencies To Be Tested

Since a complete threshold test of every child at all frequencies may not be feasible or desirable, a selection of certain frequencies must be arrived at through some process of compromise. Certain factors which enter into the making of this compromise must be carefully weighed. These include the time devoted to the initial screening, the time required in the retesting of children who fail to meet the criteria of the initial screening, the realities of the acoustic conditions of the testing environment, and the reliability of instrumentation in the testing of certain frequencies.

The Committee on Identification Audiometry of the American Speech and Hearing Association, in 1961, recommended that no less than four, preferably five, frequencies be tested. The frequencies recommended for identification audiometry at the school-age level are 500, 1000, 2000, 4000, and 6000 c/s.



Intensity Levels and Criteria for Failure

In the discussion that follows it is to be remembered that a two-step audiometric procedure is undertaken prior to referral of a child to an otologist. The first step is a four-or five-frequency screening test. The second step consists of a threshold test involving the same frequencies. The criteria for failure apply to both steps. The first test is designed to yield a considerably larger number of cases than are found in the second step to have a significant hearing loss. The second step is designed to identify those children most appropriately referred to an otologist for a diagnostic examination. The interposition of the second step is designed to prevent unnecessary referral.

It is recommended that only four frequencies shall be considered in the criteria for referral: 1000, 2000, 4000, and 6000 c/s. A child would be judged to have failed the test and to be a candidate for referral for the next step if he failed to hear the 20db level at either 1000, 2000, or 6000 c/s, or if he failed to hear the 4000 c/s tone at the 30 db intensity level in either ear.

Also to be considered for referral or rechecking are those who are frightened, who seem to be trying to outwit you, those tested during a noisy period, and in general those where testing was difficult.

Record all variations on the audiograms.



Maintenance of Equipment

One should periodically listen to each phone to be sure that it is operating and to determine whether increasing the intensity 5 db results in corresponding changes in loudness. The audiometrist, who knows his own andiogram, should check his hearing daily and at least bi-weekly check the audiometer with a group of individuals not noise-exposed and known to have normal hearing.

One should not solder joints and replace the earphones from one audiometer with those from another.

If difficulties persist beyond this first-echelonmaintenance the audiometer should be checked by the manufacturer. Do not take them to local electricians! It is strongly recommended that an audiometer should be returned to the factory (or factory-designated regional center) for calibration check, re-calibration, and any necessary repair no less frequently than once each calendar year.

Maico audiometers are provided to speech clinicians in North Dakota through the Department of Public Instruction. The address for servicing is:

THE MAICO COMPANY
21 N. 3rd Street
Minneapolis, Minnesota

The cost of re-calibration is usually \$50 to \$75 and should be included in the maintenance budget of the speech correction program. Get approval from your school administrator before you send in the machine.



Maintenance of Equipment (continued)

The machine should be well-packed in the case with crumpled newspaper around it in a heavy cardboard box and tied with heavy cord or rope. Such precautions will cut down on your repair bill. Details for care, operation and maintenance are given in the Appendix of this manual.



GENERAL TEST METHODOLOGY

Identification audicatery in the school-age population is best described in two stages. Individual Pure Tone Sweep Frequency Testing and Individual Pure Tone Threshold Testing.

Individual Pure Tone Frequency Testing

This first stage has traditionally been called screening audiometry. It involves the testing in an abbreviated way of large numbers of children resulting in the ready identification of those who have no hearing problems and the tentative identification of those who may have hearing problems.

Method: Set the frequency dial at 500 c/s and set the hearing level dial at 30 db or well enough above the hearing threshold of the child to elicit a response. If the child responds, lower the reading to 20db. If the child responds, continue at 20db up through 1000, 2000, 4000, and 6000 c/s in the same ear giving only one presentation of the signal at each frequency. When 6000 c/s has been reached, switch to the opposite ear and proceed down the frequency scale. (One may have to present the signals at the 25 db level, depending on the noise level of the testing room.)



Individual Pure Tone Threshold Testing

This second stage involves a test of minimal hearing sensitivity; this is a more detailed test by more highly trained personnel with more elaborate equipment. Its purpose is to lead to the final identification of those who should be referred to an otologist, or other physician, for a complete diagnostic work-up. When conducted by a competent technician, this test constitutes an accurate and descriptive type of auditory acuity measurement.

Method: (1) Present a tone of sufficient loudness to evoke a clear response at 1000 c/s. (2) Decrease the tonal level until the stimulus is inaudiole in 10 db steps. (3) Begin exploration of threshold. Use short tonal presentations and make each presentation 5 db stronger than its predecessor to which there was no response. (4) Continue dropping by 10 db to each response and raising in 5 db steps until you get 3 responses at a single intensity. This is threshold. After completing this at 1000 c/s, move on and test 2000, 4000, and 6000 c/s; then retest 1000 c/s to test for reliability and then proceed down to 500 c/s or more if you so desire. Available mid-octave frequencies should be tested whenever the threshold difference between octaves is 30 db or more.

This is the preferred method of determining threshold as recommended by Carhart and Jerger in the <u>Journal of Speech and Hearing Disorders</u>.



November, 1959. One should refer to this article prior to conducting any individual pure tone threshold testing.

Procedures Common to Both of the Above Steps

a. Instructions
Give all instructions to the child before putting the earphones
on him.

Some individuals might want to go to the classroom before the testing and tell the children in a group about the test. This might be necessary when changing the method from what was used the previous year or with children who are to be tested for the first time. Instructions will have to be repeated again at the time of the test.

The following general points should be covered in the instructions:

- (1) The child will hear a series of sounds, some very highpitched such as a whistle and others low-pitched as a
 fog horn.
- (2) He is to indicate by raising his hand or finger whenever he hears a sound and lower it when the sound disappears.
- (3) Emphasize the importance of listening and responding to very faint sounds, not merely when he can hear them easily.

NOTE: The actual instructions given to the child will have to be adapted to the level of understanding.



- b. Test the child's <u>better</u> ear first on the basis of previous audiometric data or on the client's judgment. If there is no apparent difference, test the right ear first.
- c. All pure tone hearing testing should be done with the interrupter switch in the "normally off" position. This means that the tone is off until the interruptor switch is depressed.
- d. Seat the child so that he is at a right angle or a 45 degree angle to the tester. This allows one to observe and obtain important facial clues.
- e. Use a stimulus tone of approximately 1 (one) second duration.
- f. Position the earphones tightly on the head and adjust them over the ear canals. Make sure that strands of hair and bows of glasses do not interfere with good fitting.
- g. Accuracy of the testing is much more important than the number of children tested per day. If after some time with a child one feels that there is any question regarding the accuracy of his responses, the job is not done.
- h. Caution: While testing make sure that you are not giving clues to the child as to when to respond. Vary your pattern of tonal presentations so that he will not respond to the pattern. Also, don't look at the child every time that a presentation is made expecting a response. The child will very likely begin responding to your expectant looks rather than to the tone.



- i. Don't jump to the conclusion that the child has a hearing loss because he doesn't pass the screening. Many factors can influence the testing:
 - (1) Audiometer not functioning properly
 - (2) Child not sure of instructions
 - (3) Ambient Noise
 - (4) Child is not cooperative

In the event of inconsistent signals it might be a good idea to take the earphones off the child and reinstruct him.

j. All hearing results are plotted on the basis of 1964 ISO reference thresholds. To convert from ASA to ISO <u>ADD</u> 10 db. To convert from ISO to ASA <u>SUBTRACT</u> 10 db.



HEARING AIDS

Use of a Hearing Aid

- 1. All possible medical care must be given or be under way before a hearing aid is used. Parents should be encouraged to have children evaluated in an audiology clinic before a hearing aid is purchased. Speech clinicians may often have to insist that children be seen by physicians, otologists or audiologists before parents buy hearing aids for children.
- 2. Hearing aids should be recommended by the audiologist and otologist and used under supervision.
- 3. Hearing evaluations and hearing aid evaluations are available in North Dakota as follows: 1) University of North Dakota Speech and Hearing Clinic, Grand Forks, and 2) Audiological Center, Minot State College, Minot, 3) North Dakota State University Speech and Hearing Clinic, Fargo.

A nominal fee is charged for the evaluations. Appointments must be made in advance.

- 4. A child may often complain that the hearing aid is noisy and that it is difficult to become accustomed to varying the volume for different voices and situations.
- 5. It is wise to remember that a hearing aid is not selective to speech only. It amplifies everything!



Use of a Hearing Aid (continued)

- 6. Teachers in the classroom will have an opportunity to help the child with a hearing aid use it effectively.
 - a. Accept the aid completely as comparable to the glasses worn by many students.
 - b. Show an interest in the hearing aid. Ask the nurse or speech clinician to assist the child in explaining its use to the teacher and then later to the class.
 - c. The pupil may have been instructed to wear the aid only during short intervals during the first week or so. Help him to do this and to care for the aid when it is not in use.
 - d. Use the aid during good listening times such as story hour, spelling period, reading lesson or discussion. Avoid the noisy periods: recess, game time, etc. for the first few days or weeks, until the child has had time to learn to enjoy listening.
 - e. The pupils may need to learn to move more quietly in the classroom and to avoid loud desk slamming, shouting, clapping and general noiseness until the new wearer of a hearing aid has learned to adjust the volume controls quickly and has developed some tolerance for sound.
 - f. If a body aid, it should be securely anchored in an undergarment,
 belt or vest for boys or in an apron or undergarment for girls.
 It should be secure enough so that the child can be active and

Use of a Hearing Aid (continued)

play without fear of losing the instrument. There may be times when it will be necessary to remove the instrument, but in most activities the child should be ablr yo wear it and use it.

- g. The teacher should learn from the nurse or speech clinician how to care for the hearing aid. There will be times when it will be out-of-order.
- h. The earmold through which the sound is transmitted to the ear must be made to fit closely to avoid feed-back and the uncomfortable squealing often heard. Earmolds are made for the individual who will wear the aid daily and will need to be cleaned periodically so that no wax or foreign matter can close the passageway of the sound.
- 7. Use Speech-reading instruction for all those 1) with a 40 db pure tone loss in the speech frequencies, 2) with progressive loss of hearing, and 3) with those who seem to have difficulty in understanding conversational speech.

Table-Model Hearing Amplifiers

If a child has medical approval to use amplified sound temporarily or if a personal hearing aid is not readily available, the clinician may use a table-model aid from the Department of Public Instruction for use in an auditory training program. The aids may also be used in the classroom in specific cases. Write to the Department of Public Instruction, Bismarck. Care and servicing of these aids is discussed in the Appendix.

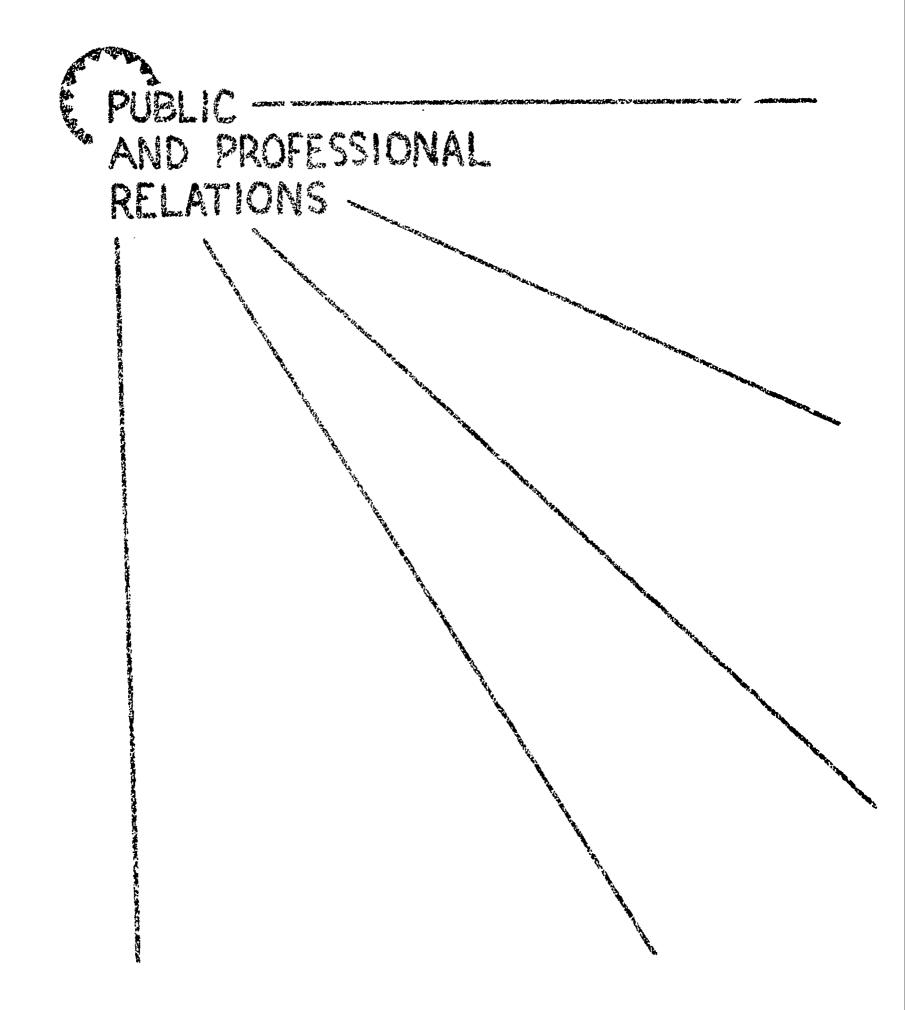


SUGGESTED READINGS

- 1. Carrart, Raymond, and Jerger, James, "Preferred Method for Clinical Determination of Pure-Tone Thresholds," Vol 24: 330-345, Journal of Speech and Hearing Disorders.
- 2. Committee on Conservation of Hearing, "Guide for the Evaluation of Hearing Jmpairment," Transactions of the American Academy of Ophthalmology and Otolaryngology, LXIII (1959), 236-238.
- 3. Committee on Identification Audiometry, "Identification Audiometry," Monograph Supplement 9 (September, 1961), Journal of Speech and Hearing Disorders.
- 4. Davis, H., and Kranz, Fred W., "The International Standard Reference Zero for Pure-Tone Audiometers and its Relations to the Evaluation of Impairment of Hearing," Vol. 7, No. 1, March 1964, <u>Journal of Speech and Hearing Research</u>.
- 5. Davis H., and Silvermen, S. R., <u>Hearing and Deafness</u>, New York: Holt, Rinehart and Winston, Inc. 1960.
- 6. DiCarlo, Louis M., The Deaf, Prentice-Hall Inc., Englewood Cliffs, New Jersey, 1964.
- 7. Myklebust, Helmer, <u>Auditory Disorders in Children</u>, New York: Grune & Stratton, 1954.
- 8. Newby, Hayes A., Audiology, New York: Appleton-Century-Crofts, Inc. 1964.
- O'Neill, John, The Hard of Hearing, Prentice-Hall, Inc., Englewood Cliffs, New Jersey, 1964.
- 10. Streng, A., et. al., <u>Hearing Therapy for Children</u>, 2nd Revised Ed. New York: Grune & Stratton, Inc., 1958.



SECTION 4





SECTION 4

PUBLIC AND PROFESSIONAL RELATIONS PROFESSIONAL PERSONNEL LIAISON

Information concerning the broad aims and scope of their respective programs, as well as specific information concerning individual children should be exchanged between speech clinicians and other professional personnel. This is essential to assure a cooperative interagency approach to the child and his problems.

1. School Personnel = The speech correction and hearing conservation program is an integral part of the school services.

Its justification is that it is necessary for the total development of the child. The speech clinician is encouraged to develop positive relationships with the following:

Administrative personnel - The administrative structure under which the public school speech clinician will function in North Dakota will vary:

County program - County superintendent of schools, the individual school administrator, the county special education board, the county director or supervisor of special education, or a combination of these.

City program - Superintendent of schools, director or supervisor of the special education program in the system, the individual building principal, the director of pupil personnel, or a combination of these.



School Personnel (continued)

In order that the administrative personnel may give
the speech correction program support and guidance,
the speech clinician should regularly inform such
personnel of the progress of the program. The speech
clinician should have regular visits with the administrator and make periodic reports containing pertinent
facts about the program including numbers of children
examined, enrolled, or on waiting lists; grade levels
represented; types of problems and incidence of each;
conferences held; referrals made; etc.

The Classroom Teacher - The speech clinician should become familiar with the pupil's classroom relationships and achievements. He should inform the classroom teacher of the goals of the speech and hearing program, and should discuss with the teacher the pupil's response and progress. Fortunate indeed is the pupil whose teacher and speech clinician have formed an understanding and effective working relationship.

The speech clinician should hold a pre-program orientation meeting to

- 1. describe types of speech defects
- 2. discuss attitudes in the classroom toward the child with a speech defect
- 3. emphasize the importance of speech defects in the child's total development.

The speech clinician will need to coordinate classroom and speech correction programs by

1. giving the teacher a copy of the schedule



School Personnel (continued)

2. having regular teacher conferences

3. Offering suggestions for carry-over of speech correction into classroom activities

The speech clinician may need to make special effort to have an opportunity to give pertinent information about the speech correction program at teachers meetings throughout the school year.

Other School Personnel - The speech clinician should develop communication with other specialized school personnel who offer services beneficial to the child. These may include the public health nurse, visiting counselor to socially and emotionally maladjusted children, school psychologist, school counseling and guidance personnel, remedial reading teachers and others.

Parents - The role of the parents in the speech correction program is an extremely important one. Without the information that parents can provide, the speech clinician's diagnosis must be considered incomplete. The parents' understanding and support can greatly aid the child's progress in the speech correction program.

The following communications may be useful to a speech clinician working with parents:

Initial interview - describe the child's needs and explain the speech correction program.

Subsequent communications - conferences at school, at home and by phone to discuss the child's progress.

Also send written progress reports.



School Personnel (Continued)

3. Health and Medical Services - Health and medical services are an integral part of the total speech correction program. It is important that a professional relationship be developed which has as its common goal the welfare of the child.

Public health nurse - The knowledge the nurse has of the community and its members is an invaluable aid to the speech clinician. Mutual respect and cooperation are essential to the success of their respective programs. Whatever the eventual cooperative arrangements might be between the clinician and public health nurse, it is essential that communication be established early and that areas of individual responsibility be clearly defined. The following are some areas where working cooperatively with the nurse may be helpful:

- 1. hearing testing and oral examinations
- 2. medical and dental referrals
- 3. home visits and case histories
- 4. referrals to other agencies and service organizations

Mental health services - The following offer diagnosis and/or treatment for children with emotional problems. For complete information as to specific services offered by each, the speech clinician should write to the individual agencies:

- 1. The State Psychiatric Clinic, Bismarck
- 2. The Division of Mental Health and Retardation, Community Services, State Department of Health, Bismarck
- The Out-Patient Treatment Center, State Hospitsl, Jamestown



4. Division of Special Education, Minot State College, Minot

5. Medical Rehabilitation Center, University of North Dakota, Grand Forks

6. Community Mental Health and Retardation Centers, Grand Forks, Bismarck, Fargo, others as they develop

7. Area Social Service Centers (See Welfare Services, Below)

8. Psychologists in private practice

Private health services - Dentists, orthodontists, and prosthodontists, familyphysicians, medical specialists including pediatricians, otologists, rhinologists, and laryngologists, eye, ear, nose and throat specialists, neurologists and psychiatrists. The speech clinician may wish to inquire of the North Dakota Medical Association, Elks Building, Bismarck, concerning the location of these specialists in the state. A listing of otologists is distributed to speech clinicians each year by the North Dakota Speech and Hearing Association.

4. Welfare Services - The speech clinician frequently has occasion to solicit aid and cooperation from public welfare agencies and from voluntary and service organizations. County Welfare Boards in each county maintain professional personnel who in turn can call on staff from the state or regional offices.

The Public Welfare Board of North Dakota

Area Social Service Centers provide social, psychological,

psychological, and psychiatric evaluations; treatment; and

consultation services to individuals, families and agencies.



The centers are located in Bismarck, Fargo, Grand Forks, Jamestown, Minot, Williston, Devils Lake and Dickinson.

Crippled Children's Services - County Welfare offices take the applications for services for crippled children which are provided through state and federal funds. Medical expenses and treatment costs are paid in approved cases for defects such as cleft palate, orthodontic problems, hearing losses, mental retardation, cerebral palsy and other conditions.

The Cleft Palate Team - This is a volunteer team which includes a surgeon, an orthodontist, a prosthodontist, a speech pathologist, and a social worker. Monthly clinics are held in Minot from September through April and in other cities in May. No charge is made for the team evaluations.

<u>Psychological Services</u> - Personnel in state and area social service centers are available to county welfare boards for testing and consultation services.

County Welfare Boards - These boards offer such direct child welfare services as counseling, foster home placement, financial assistance and act as referral agencies for Crippled Children's Services, Elks Youth Camp (Camp Grassick) and others. Extent of services vary from county to county.

<u>Voluntary and Service Organizations</u> - Various state and local agencies provide financial assistance to speech and hearing services for children.

5. Division of Vocational Rehabilitation - The Division of Vocational Rehabilitation provides a state and federally supported program of assessment and training for vocationally handicapped youth and adults. Usually clients are 16 years of age or older and are no longer in school when admitted to the program. They may be trained on-the-job or sent to a special training program where their living and training are paid for by the Division of Vocational Rehabilitation.

There are regional offices in Bismarck, Minot, Grand Forks and Fargo. The state office is located in Bismarck, in the Professional Building. Write to the state office for the name of the counselor who serves the county in which you are located.

6. Speech and Hearing Resource Personnel and Services

Out-patient Speech and Hearing Services

Minot State College, Speech and Hearing Clinic, Minot
North Dakota State University, Speech and Hearing Center,
Fargo

University of North Dakota, Medical Center,
Rehabilitation Unit, Grand Forks
University of North Dakota, Speech and Hearing Clinic,
Grand Forks
Crippled Children's School, Out-patient Department,
Jamestown



Special Schools

Crippled Children's School, Jamestown - A private and secondary school for physically handicapped children which offers physical and occupational therapy, speech and hearing, and classroom facilities for the hard-of-hearing.

State School for the Deaf, Devils Lake - A statesupported elementary, secondary, and trade school for the deaf.

Opportunity School, Fargo - A private day school for physically handicapped, mentally retarded, and preschool deaf and hard-of-hearing children.

Grafton State School for the Mentally Retarded - A speech correction program is available for those who can benefit from it.

Other Speech and Hearing Programs

North Dakota State Elks Youth Camp (Camp Grassick) A summer camp offering speech correction and hearing
rehabilitation, physical therapy, and remedial
reading during six weeks summer session. It is
operated by the North Dakota Society for Crippled
Children and Adults, Jamestown. Applications for
campers are processed by county welfare offices.

Summer speech clinics - Occasionally county speech clinics are set up by county superintendents of schools or local school boards.

Private practice - See the Directory of the American Speech and Hearing Association for a listing of qualified speech and hearing clinicians.

Individual speech correction for children - School districts not having a speech correction program may apply to the Department of Public Instruction for funds to pay for speech correction if the services of a qualified speech clinician can be obtained on an individual or part-time basis.



Community Information Projects

In giving information to the public, through whatever media, individual cases should never be discussed or identified. It is important that general information about the services available and their purpose should be presented whenever possible, however. Community interest and support are essential to the success of the speech correction program. This interest and support can best be generated by keeping the community informed. The following topics might be included when presenting information:

Speech and hearing defects - kinds and causes

Speech correction - purpose and demonstration

Hearing conservation and training - purpose and demonstration

The local speech and hearing program - daily or weekly
routines, financing

Public attitudes toward speech and hearing defects - common misconceptions need to be discussed and discredited, such as:

Speech defects are always outgrown.

Children with speech defects usually aren't very bright.

Speech defects are inherited and there's nothing you can
do about them.

If children were taught phonics, there wouldn't be any speech defects.

All children with speech defects are tongue-tied. Children can correct themselves if they just want to. People should just turn around and look away when a person stutters.

Tell the stutterer to start over and talk slower and he'll be all right.

Make children say words over and over and they'll learn to say them correctly.

Ways of disseminating information in the community include:

Mass media - Television, radio, newspaper, school paper,
periodicals, organization publications, bulletins from
state and local agencies.

Direct contact with community groups - P.T.A. and other parent groups, service clubs, community organizations, professional groups, specific conferences, letters and reports to special meetings.



SECTION 5 APPENDIX

SPEECH CLINICIAN'S CONTRACT

Form 17
Make in Triplicate
Copies for
Schl. Clerk
Co. Supt.
Teacher

Co. Supt.			
Teacher			
State of North	Dakota		
County of			
	Schl District No		
This agreeme	nt, made and entered into the	nis day of	of 19_
between	nt, made and entered into the	led teacher holding a	
valid North Dak	ota Teacher's Certificate No	and havin	ng the re-
quired training	to qualify as a speech corn	rectionist in North I	Dakota
	Department of Public Instru		
	n and the County Superintend		
-	e of all county schools part		
•		•	
Witnesseth:	That said speech clinician	being certified to	
	blic Schools in said County	_	ntracts
	eech correction program in		
term of m	onths beginning on the	day of	9
19 for which	onths beginning on the services rendered the	County	Speech
Correction Prog	ram agrees to pay said speed	ch clinician an annua	al
	Dollars, payable in ed		

- Provided: 1. That the salary for the first month of the school term shall not be paid until the clinician has filed his valid teacher's certificate and Speech Correction Credential with the county superintendent.
 - 2. That the salary for the last month of the school term shall not be paid until the term report shall be made, filed with and approved by the County Superintendent of Schools.
 - 3. That if said clinician is a member of the Teachers Retirement Fund, authorizes said County Superintendent of Schools to retain per cent of her (his) salary at the end of each school month or installment to be remitted to the county treasurer as required by law.
 - Assessments are: 1-8 years, 4% (up to \$120.); 9-16 years, 5% (up to \$180.); 17 or more years, 6% (up to \$200)
 - 4. The assessments which are deducted from the clinician!s salary must be matched by an equal amount from the funds collected from the county schools and must be sent to the county treasurer. Use the following schedule:



5. If said Teacher is a member of the Teachers Retirement Fund, said School District is authorized to retain per cent of h salary at the end of each school month (or installment) to be remitted to the county treasurer as required by law.

Assessments are: 1-8 years, 4% (but not over \$120); 9-16 years, 5% (but not over \$180); 17 or more years, 6% (but not over \$200). 15-3914.

6. The assessments which are deducted from clinician's salaries must be <u>matched</u> by an equal amount from the general fund of the school district and must be sent to the county treasurer. Use the following schedule:

Matching: 1-8 years, 4% (but not over \$50); 9-16 years, 4% (but not over \$120); 17 or more years, 4% (but not over \$120). 15-3914; 15-3917.

7. Any clinician who comes from a school or educational institution supported by public taxation in another state of this nation and becomes a clinician in a public school or state institution within North Dakota may elect to have not to exceed seven years out of state teaching accredited in North Dakota provided he declares his request to the Board of trustees of this fund for such out of state credit within the first year after he begins teaching in North Dakota. 15-3915.

FURTHER PROVIDED, That Social Security payments are to be deducted and paid as required. School Districts agree to share in the cost of this course according to the schedule opposite their names. It being understood that the State Department agrees to pay \$3000.00 toward the program.

FURTHER PROVIDED, That article 3, checked above, be waived by both and the above mentioned school districts.

By order of the District School Board FURTHER PROVIDED, That the above mentioned school districts agree to deposit the sum opposite their names with the Ward County Treasurer not late than October 1, 19 . FURTHER PROVIDED, That the total cost of this program shall not exceed and if the above stated amount is expended before the expiration of this contract, the contract shall become void and the program shall cease. FURTHER PROVIDED, That according to the number of children needing such help in each school.

FURTHER PROVIDED, That outlying districts shall be notified when testing is to be done in the several schools and any child needing therapy help shall be helped in the district of the parents choice. The district from which such child comes must agree to pay tuition fee of \$30.00 for the year.

FURTHER PROVIDED, That one center shall be set up in the Court
House at Minot and children from outlying districts may be brought
to that center for help.

FURTHER PROVIDED, That this sheet shall be attached to and become
a part of the contract entered into this

between _______ and the above mentioned school
districts.

The schedule below shall be used as payments due from each participating school district:

(Space should be provided below for the signatures of Clerks and Presidents of Schools from <u>each</u> district and the signature of the Speech Clinician)



Form 17 Made in Triplicate Copies for: Schl. Clerk Co. Supt. Teacher

SPEECH CLINICIAN'S CONTRACT

Burlington Sch. Dist. #7 Douglas Sch. Dist. #95 Carpio Sch. Dist. #156 Makoti Sch. Dist. #153 Foxholm Sch. Dist. #155 Ryder Sch. Dist. #138 Sawyer Sch. Dist. #16

County of
Sch. Dist. No.
THIS AGREEMENT, Made and entered into this
School District No. County of State of North Dakota, here- inafter called the SCHOOL DISTRICT. WITNESSETH: That said speech clinician being certified to conduct a speech correction program in the Public Schools in said County and State
hereby contracts to teach in Districts above mentioned and Ward County Court House for a term of months, beginning on the day of 19, for which services truly rendered the School Board of said School District agrees to pay said speech clinician an annual salary of
, Dollars, payable in equal installments as follows:

- 1. The salary for the first month of the school term shall not be paid until the clinician has exhibited his valid teacher's certificate to the school clerk. 15-3612
- 2. The salary for the last month of the school term shall not be paid until the term report shall be made, filed with and approved by the County Superintendent of Schools. 15-3803.
- 3. This contract continues in effect for the next school term unless the clinician is notified in writing on or before April 15 that h services are not required for the next school term. However, the teacher is required to notify the school board, in writing, on or before May 1 of his or her acceptance or rejection of the continuing contract. Failure on the part of the clinician to notify the board shall relieve the Board of the continuing contract provisions of the law. 15-4727.
- In the event of breach of contract on the part of a clinician, the superintendent of public instruction shall suspend (attorney general has ruled that a hearing must be held previous to suspension) such clinician's certificate for a period of not to exceed one year, during which time it shall be unlawful for such clinician to receive payment for teaching in the public schools of North Dakota. 15-4728.



Matching: 1-8 years, 4% (up to \$50.); 9-16 years, 4% (up to \$120.); 17 years or more, 4% (up to \$120.)

- 5. This contract continues in effect for the next school term unless the clinician is notified in writing on or before April 15 that ______ services are not required for the next school term. However, the teacher is required to notify the school board in writing, on or before May 1 of his or her acceptance or rejection of the contract. Failure on the part of the speech clinician to so notify the board shall relieve the board of the continuing contract provisions of the law.
- 6. That in the event of breach of contract on the part of the speech clinician the superintendent of public instruction shall suspend (attorney general has ruled that a hearing must be held previous to suspension) such teacher's certificate for a period of not to exceed one year, during which time it shall be unlawful for such speech clinician to receive payment for teaching in the public schools of North Dakota.
- 7. Any teacher who comes from a school or educational institution supported by public taxation in another state of this nation and becomes a teacher in a school or state institution within North Dakota may elect to have not to exceed seven years out of state teaching accredited in North Dakota provided he declares his request to the Board of Trustees of this fund for such out of state credit within the first year after he begins teaching in North Dakota.

Further Provided, that the speech clinician shall furnish own means of transportation and shall receive travel reimbursement not to exceed ten cents per mile for mileage incurred in carrying on the speech correction program in the county. It is further understood that 2 days of each week shall be spent in the ______ Public Schools and three days shall be divided among the other schools in the county as required by the numbers of children needing speech correction.

By order of the Schools of ____ County, represented by the County Superintendent of Schools

County Superintendent of Schools

Speech Clinician

Classroom Speech and Hearing Record Public School

School:	Grade: Teacher:	pace:
Speech Clinicia	an:	
	Speech	Hearing
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.	A BOOL STATE OF THE STATE OF TH	
9.	,	
11.	After the initial screeni of speech and hearing tes	sts are tabulated on this
12.	sheet. Four copies are me following: classroom teadministrator and one kep	nade and sent to the acher, principal, school of for speech file. In
13.		re sent to the individual
14.		
15.		
16.		
18.		
19		
21.		
22.		



SPEECH CORRECTION PROGRAM Individual Progress Report Public School

Name:	Grade:	Age:	School:
Parents:	Address:		Date:
Date Speech Correction Began:	Sr	eech Clinician	•
Description of Speech Defect:			
Objective of Speech Correction	n :		
	Ī	ó.	
··· .			must be in the child's reach nine-month period
			f his program so this in- available to admin-
Response and Progress:	interest	ted persons. A	icians and other duplicate copy is sent
		ol or county sup nician's final :	perintendent as a part of report.

Recommendations:



THE CASE HISTORY

It will not be necessary to complete a long form case history for each child. However, in many cases and whenever making referral to other services or to medical doctors it is important to have the information about the child on a case history form.

1) Interviewing - Those who have had limited experience or training in interviewing will find the subject discussed helpfully in Diagnostic Methods in Speech Pathology by Johnson, Darley and Spriestersbach, Harper and Row, 49 East 33rd Street, New York 16, Publisher.

Also see <u>The Dynamics of Interviewing</u>
Kahn and Cannell, John Wiley and Sons, Inc.,
New York.

- 2) Case History Form: However the form is set up it should include data on the following:
 - a. Identification of interviewee and interviewer
 - b. Referring agency or individual
 - c. The problem (as stated at outset of interview)

History of the problem
When was speech defect identified?
Attitude of parents?
Child's attitude toward defect
Development of speech
age - kind - etc

Developmental History
Birth history
Age of sitting, walking, toilet training, etc.

Medical history
Illnesses
Disabilities
Vision - hearing

School history



The Case History (continued)

Social history
Family's socio-economic status
Home conditions
Family members
Discipline practices
Relationships in the home
Age of playmates
Bilingualism
Others

Family history
Parental and grandparental health

Comments on the Interview
Rapport felt during interview
Language and expressive reactions
Emotional tone and reactions
Other observations



DIAGNOSTIC ARTICULATION RECORD

Name	School		_Grade			
Clinician		Da	ate			
Consonant Sounds		Vowel Sounds				
p pan, paper, cap	e beat		oo moon			
b boy, baby, Bob	i bit		u mew	Ш		
m man, Tommy, home	e bet		o boat			
h here, birdhouse	a bat		ou house			
wh white	a father		a make			
w watch, sandwich	u gun		i pipe			
t tie, butter, cat	a arm		oi point			
d day, daddy, bed	a ball		oo book			
n name, funny, one	Co	nsonar	nt Blends			
l little, pillow, ball	tw twelve	Ti	skr scream			
r red, carrot, car	1					
k key, cookie, cake	dw dwarf		shr shred			
g game, wagon, dog	bl blue		spr spring			
ng singing, ring	kl clock		str street			
y yellow, barnyard						
f fan, often, knife	fl fly	-	tr tree			
v vase, seven, five	gl glad		thr three			
th thumb, bathtub, teeth	pl play		sk sky			
th this, weather, smooth	sl sled		sm small			
s soup, guessing, mouse	†					
z zipper, scissors, nose	spl splash	-	sn snow	-		
sh shoe, washing, fish	br bread		sp spoon			
zh measure ch chair, teacher, watch	kr cry		st star			
j jump, engine, orange	dr draw		ระ ระจำกล			
o omery ordered	i araw		sw swing			
	fr friend	-	kw quick			
	gr green		skw squirrel			
	pr price		ks box			

DIRECTIONS: If sound is correct, make no notation. For sound substitution or distortion, record diagnosis phonetically. For omission, record "O". (Adapted from Administrative Guide to Speech Correction, State Department of Education, Jefferson City, Mo.)



Speech and Hearing Record
Public School

NAME:	AGE:	<u></u>	···	GRA	DE:				
PARENTS:	ADI)RES	s <u>:</u>	····		·•		TEL:	
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2. SLed, STairs, SQUirrel									
3. Zipper, sciSSors, noSe							#*************************************		
4. Thumb, tooThbrush, teeTh								. 	
5. THRead, feaTHer, swiNG									
6. Red, baRa, caR						· · · · · · · · · · · · · · · · · · ·			
7. TRee, ice CReam cone, DR	lum	i .	2			are an anni an anni			
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12. SHoe, waSHing, maCHine,	fish								~
13. Cat, chiCKen,milK									
14. Gun, waGon, piG									
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ne basis of: 1951 ASA reference threshol	.ds	10	conv	ert	from I	SU TO	ASA S	ORIKA	<u>1</u> 10
1964 ISO reference threshol	.ds								
(Check one of these squares	.)								

SUMMARY SHEET

Speech and Hearing Therapy Public Schools

Grade	No. of Children	No. Tested	No. O.K.	Medical Referral (Hearing)	Speech Defect	Received Correction	No. Dis- missed from Sp. Correct.
1.							
2.							
3.							
4.							
5.							
6.							
7.							
8.							
9.			·				
10.							
1.							
12. Total							

AUDIOMETRIC EVALUATION

7477	ME:_				 		AGE:_		_SEX:	DATE:
TE	ESTED	BY:					SCH00	L:		GRADE:
										TY: Good Fair Poor
					Fair_					
					AUDIOGR					
		E1			Z (Hertz					
10) E		-					6	ւ Զ1	AUDTOCRAM CODE
44	25				B (1964 v			<u></u>		AUDIOGRAM CODE
9					10			9	.5 11	.5
0	,					_				Ear Air Bone Colo
.0 -	~~~									L X C Blue
20 -		_								Type of Test: Screen dB level
80 -		_								Threshold
÷0 -										This audiogram is plotted
50 -									ļ	on the basis of: 1951 ASA reference
50										thresholds 1964 ISO reference
	•									thresholds (Check one of these
70 -	, <u></u>									boxes.)
80								<u> </u>		To convert from ASA to I
90									-	ADD 10 dB. To convert from ISO to A
00 +			-						-	SUBTRACT 10 dB.
10										
									<u> </u>	A/C Masking Level in dB i
				L R	L R	L R	Ţ.	R_I	р	Non-Test Ear



MEDICAL REPORT Hearing Conservation Survey

NAME:	AGE:	SCHOOL:	
DATE:	SEX:	EXAMINER:	
	AUDIOLOGICAL EXAM	INATION	
AUDIOGRAM CODE	250	Frequency i 500 1000 2000	n Hz. 4000 6000 80
Ear Air Bone Color Red L X L Blue	+ 10 - + 20 -		
e of test: ceendB level ceshold	70		
s audiogram is plotted the basis of: 1951 ASA reference thre 1964 ISO reference thre	esholds H 100 110 110 110 110 110 110 110 110 1	o convert from ASA convert from ISO to	to ISO ADD 10 di ASA SUBTRACT 10
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CODE OF ETHICS of the AMERICAN SPEECH AND HEARING ASSOCIATION*

The preservation of the highest standards of integrity and ethical principles is vital to the successful discharge of the responsibilities of all Memisson. This Code of Ethics has been promulgated by the Association in an effort to high ght the fundamental rules considered essential to this basic purpose. The failure to specify any particular responsibility or practice in this Code of Ethics should not be construed as denial of the existence of other responsibilities or ractices that are equally important. Any act that is in viction of the spirit and purpose of this Code of Ethics shall be unefficiely practice. It is the responsibility of each Member to advise the Committee on Ethical Practice of instances of violation of the principles incorporated in this Code.

Section A. The ethical responsibilities of the Member require that the welfare of the person he serves professionally be considered paramount.

- 1. The Member who engages in clinical work must possess appropriate qualifications. Measures of such qualifications are provided by the Association's program for certification of the clinical competence of Members.
 - (a) The Member must not provide services for which he has not been properly trained, i.e., had the necessary course work and supervised practicum.
 - (b) The Member who has not completed his professional preparation must not provide speech or hearing services except in a supervised clinical practicum situation as a part of his training. A person holding a full-time clinical position and taking part-time graduate work is not, for the purpose of this section, regarded as a student in training.
 - (c) The Member must not accept remuneration for providing services until he has completed the necessary course work and clinical practicum to meet certification requirements. The Member who is uncertified must not engage in private practice.
- 2. The Member must follow acceptable patterns of professional conduct in his relations with the persons he serves.
 - (a) He must not guarantee the results of any speech or hearing consultation or therapeutic procedure. A guarantee of any sort, expressed or implied, oral or written, is contrary to professional ethics. A reasonable statement of prognosis may be made, but successful



results are dependent on many untrollable factors, hence, any warranty is deceptive and unethical.

- (b) He must not diagnose or treat individual speech or hearing disorderes by correspondence. This does not preclude follow-up by correspondence of individuals previously seen, nor does it preclude providing the persons served professionally with general information of an educational nature.
- (c) He does not reveal to unauthorized persons any confidential information obtained from the individual he serves professionally without his permission.
- (d) He must not exploit persons he serves professionally:
 (1) by accepting them for treatment where benefit cannot reasonably be expected to accrue: (2) by continuing treatment unnecessarily: (3) by charging exorbitant fees.
- 3. The Member must use every resource available, including referral to other specialists as needed, to effect as great improvement as possible in the persons he serves.
- 4. The Member must take every precaution to avoid injury to the persons he serves professionally.
- Section B. The duties owed by the Member to other professional workers are many.
- l. He should seek the freest professional discussion of all theoretical and practical issues but avoid personal invective directed toward professional colleagues or members of allied professions.
- 2. He should establish harmonious relation with members of other professions. He should endeavor to inform others concerning the services that can be rendered by members of the speech and hearing profession and in turn should seek information from members of related professions. He should strive to increase knowledge within the field of speech and hearing.
- 3. He must not accept fees, gifts, or other forms of gratuity for serving as a sponsor of applicants for clinical certification by the American Speech and Hearing Association.
- Section C. The ASHA Member has other special responsibilities.
 - 1. He must guard against conflicts of professional interest:



- (a) He must not accept compensation in any form from a manufacturer or a dealer in prosthetic or other devices for recommending any particular product.
- It is permissible only to employ a business card or similar announcement, and to list one's name, highest academic degree, type of services, and location in the classified section of the telephone directory in the manner customarily followed by physicians and attorneys. He may state that he holds the Certificate of Clinical Competence in the appropriate area (speech or hearing) issued by the American Speech and Hearing Association.
- (c) He must not engage in commercial activities that conflict with his responsibilities to the persons he servesprofessionally orto his colleagues. He must not permit his professional titles or accomplishments to be used in the sale or promotion of any product related to his professional field. He must not perform clinical services or promotional activity for any profit-making organization that is engaged in the retail sales of equipment, publications, or other materials. He may be employed by a manufacturer or publisher, provided that his duties are consultative, scientific, or educational in nature.
- 2. He should help in the education of the public regarding speech and hearing problems and other matters lying within his professional competence.
- 3. He should seek to provide and expand services to persons with speech and hearing handicaps, and to assist in establishing high professional standards for such programs.



GUIDE FOR EVALUATING PROFESSIONAL GROWTH AND TEACHING EFFECTIVENESS OF THE SPEECH AND HEARING THERAPIST

Individual Characteristics

by: Elizabeth C. MacLearie, Supervisor State of Ohio Department of Education Division of Special Education

I. PERSONAL QUALITIES

Appears appropriately dressed and well groomed before students. Has well-modulated voice of good quality. Has speech free from defects and normal hearing. Uses adequate vocabulary and English free from errors.

- face of petty annoyances.

 6. Evidences judgment and tact.

 7. Is punctual and dependable.
- 8. Practices the kind of good manners that come of a thoughtful; awareness and consideration of others.....

5. Maintains a well-poised manner in the

- 9. Shows enthusiasm for the field of speech and hearing....
- 10. Has hobbies and interests other than his profession. Keeps abreast of current events.

B. Teacher-Pupil Relations

- 1. Understands and shows sincere interest in children.....
- 2. Avoids discussion with others of children's speech difficulty in their presence.....
- 3. Creates an atmosphere in which children feel free to discuss their problems.
- 4. Commends or praises more than re-
- 5. Goes out of way to help unattractive or troublesome students.....
- 6. Deals with children in a kindly, firm and impartial manner....



C. Teacher-Staff Relations

1.	school without derogatory or private	
	comments	
2.	West of the second of School	
	projects without undue concern as	
•	to who gets the credit	
3.		
1,	ance or to help others	
4.		Ì
5.	schedule permits	•••••••
→	joins in their social activities	
6.	Cooperates with other personnel con-	•••••
	cerned with child welfare	
7.	Seeks advice from principals and super-	
	visors	
8.	Welcomes constructive criticism and	
_	profits from it	
9•	Makes well-organized written reports to	
	administrators at regular intervals	,
٦.٥	concerning status of the program	
10.	Informs principal prior to change in	
	schedule	• • • • • • • • • • • • • • • • • • • •
D. Tea	cher-Community Relations	
1.	Participatos in community office :	
V	Participates in community affairs in some fashion such as: joining church,	
	clubs and civic groups	
2.	Establishes good working relationships	• • • • • • • • • • • • • •
	with other agencies concerned with	
	child welfare	
3•	Gives talks to civic groups concerning	
	the speech and hearing program.	
4.	Under guldance of the superintendent	
	prepares articles for the press con-	
مو	cerning progress of the program	• • • • • • • • • • • • • • •
5,	Supports and participates in parent-	
ϵ_{ullet}	teacher groups	•••••••
U.	The same of the contract with parents of	
	children enrolled in therapy through	
7.	home calls and interviews at school	••••••
, •		
	awareness of parents' viewpoints and in a manner conducive to good will, and	
	to improve pupil growth	
8.	Assumes just share of community fin-	••••••••••
	ancial responsibilities	



II. PROFESSIONAL QUALITIES

	1.	nati hear	ngs to and is active in state and onal associations of speech and ing therapists and to other ational organizations
	2.	Is a proj	lert to finding new materials and ects with which to enrich hing.
	3.		to professional library each year
	4.	Atte educ	nds district, state and national ational conferences insofar as
	5•	Adhe	nces permitres to the accepted ethical dards of the profession
	6.		established program in con-
		esta	ance with minimum standards blished by the State Board of ation
		Educ	a LL OII.
III.	TEA	ACHIN	G PERFORMANCE
	Α.	Clas	s Management
		1.	Begins and ends each class on schedule
		2.	Requires children to enter and leave class in an orderly manner
		•	Maintains a warm friendly atmosphere which promotes pupil confidence without
			loss of dignity
		5•	to capacity
		6.	goals for himself
		7•	Disciplines in such manner as to encourage pupil self-control
		8.	Makes the place in each school where speech class is held as attractive as
		9•	Displays pictures and materials which are meaningful in terms of work being
		10.	done



13	. Has established (under supervision of the local administrator) a system or permanent records in line with those used by the school
12	Reeps own speech to a minimum
В. Л	Ceaching Techniques
]	Begins therapy only after complete diagnostic speech and hearing tests have been given
2	2. Adapts activities to the age and speech development of the children
-	Organizes each lesson so that each child is participating at his level of ability
l	V. Shows evidence of careful lesson plan- ning. Uses a variety of techniques. Varies work from group to group accord- ing to need
-	5. Uses progress charts to maintain in- terest when need is indicated
(of work within the child's ability to do
,	7. Keeps the classroom teacher informed of the children's progress and gives her directions for follow-up that are simple and within her time and ability to carry
8	out
,	9. Shows ability to solve own teaching problems



SPEECH CLINICIAN'S CALENDAR

Sept 1	Ready for the Job
Sept. 15	Well into testing, planning schedule - talk at teacher's meetings?
Oct. 1	Still testing?
Oct. 15	Probably have begun daily speech correction
Oct. 20	Be sure Superintendents have a copies of your report
October	NDEA and N. D. Speech and Hearing Association meetings
Nov. 15	Been asked to talk to PTA yet?
Nov.	Thanksgiving
Dec. 10	Fall state reports due
Dec. 25	Merry Christmas
Jan. 1	Happy New Year
Feb. ?	N. D. Speech and Hearing Association - shop talk
Feb.	What are your plans for next summer?
Mar.	Have you had an article in the local paper?
April	Speech and Hearing Association Committee Meetings?
April 15	Now is a good time to start parent conferences
May 1	About time for N. D. Speech and Hearing Association Meeting
May 10	Are your final reports underway?
May 25	Don't forget to have a conference with your Superintendent



DEPARTMENT OF PUBLIC INSTRUCTION M. F. Peterson, Superintendent Bismarck, North Dakota

APPLICAT	'ION	FOR	SPEC	IAL	EDUCATION
OF	EXCE	PTIC	MAL	CHII	DREN

		Or DV	OUI LICIVILLI CILLE	D10114	
Applicat	ion for			County	
School Y Date of	ear				
Applicat	ion	-			
Applicat District	ion is he	reby made by	the School Boa County of	e following special education	_
for perm programs	nission to provided	establish an for by the l	d maintain the aws of North I	Dakota:	
aoni o	s to Divis	sion of Specia	7 Education. I	low forms and return both Department of Public Instructi L be returned to you for your	on,
I. Spe	cial Class	ses			
1.	Teaching	Certificate a	licapped (Teachand Special Eddicapped child	hers must have North Dakota ucation Credential for teachin ren.)	g
	Teach	her's Name	School	Mailing Address (Include Cod	Zip le)
			appendige the agency of the second		
**************************************	Water Control of the				
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	-				
			3 . 33	פסטער היים אור פסטער דו	

If any of these classes are to be other than all day classes, please describe. (Form I-1, page 1)



2.	Trainable Mentally Handi Teaching Certificate and trainable mentally handi	l Special Education	nust have North Dakota n Credential for teaching	
	Teacher's Name	School	Mailing Address (Include Zip Coo	e de)
	any of these classes are escribe.	to be other than i	full day classes, please	
3•	Teaching Certificate an	d Special Education	ers must have North Dakota n Credential.) Do not ual instruction here. See	
	Teacher's Name	School	Mailing Address (Includ Zip Co	e de)
4.	<u>Other</u>			
	Type of Class Teacher			
	Type of Class Teacher			···
5.	Programs for Homebound			
	Approval of programs finstruction or home-to be provided following shall be made as the n	<pre>-school communicati study of an individual</pre>	ion system services will	
	The amount of reimburs the program as funds a Page 4 if you need cop	re available. Use	oved at the beginning of Form II-1. Check below (Form I-1, page 2)	

II.	Servi	000
L La	Servi	CGZ

	Certificate and Speech Corr	
	Clinician's Name	Mailing Address (Include Zip Code
	ech Clinician's services sha ch district?	red with other school districts?
2.	Children (Wisiting Counse)	olly and Emotionally Maladjusted ors must have a North Dakota ove fulfilled specific requirements
Vi	siting Counselor's Name	
Vi	siting Counselor's Name	
V1	siting Counselor's wave	
3•	Large Type Books for the P	artiall <u>y Seeing</u>
	hasis within the limit of	ade available as needed on a free loan available funds upon approval of the equest Form IV-1 for ordering large
	Book requests for the next July 1 if they are to be r	school year should be received by eady by September 1.
4.	Transportation or Lodging	
	child. Transportation fur or transportation for chil classes full-time outside may be requested by the so classroom to which the chi child resides in a foster the child's home districts	asportation and lodging for the same ads are available for either lodging dren who attend special education their home school districts. Payment shool board which is providing the ld is transported or in which the home if arrangements are made with Maximum reimbursement is are month or cost whichever is least.
	a. Type of transportation	n to be used: (Circle) Car Cab Fami
	Number of children who	o will be transported dailyor individually
	- -	III-1. (Form I-1, page 3)



b.	Lodging
	Number of children who will live in foster homes in the community in order to attend the special class
	Make application on Form III-1.

In making this application the school board guarantees that suitable rooms, qualified teachers, and adequate equipment will be provided according to the true intent and meaning of the law and the regulations of the Department of Public Instruction.

Programs completely financed with federal funds are not eligible for state reimbursement. Those partially financed under PL89-10 may also be eligible for state funds. All programs for handicapped children must be approved by the Department of Public Instruction and meet the standards set up by the Department. Circle the appropriate statement (a,b or c) below.

- a. We request reimbursement from state special education funds from the Department of Public Instruction.
- b. This program is approved for total reimbursement under (Indicate Title I or Title III).

PL-89-10: Title I Title III

c. This program is financed by both local and federal funds. A copy of the financial plan and budget is enclosed.

Superintende	ent Clerk
48 THE ST	(Do not write in this space)
Amount to be reim	bursed by the State \$
Approved by:St	ate Director of Special Education
Amoun will	t for individual instruction, transportation and lodging be approved separately as requested for individual children.
	Date Approved
and the state of t	
Please send us ad	ditional blanks for requesting approval for:
	<pre>II-I, Application for Home Teaching III-I, Application for Transportation or Lodging for</pre>
	-1. page 4)

-93-



DEPARTMENT OF PUBLIC INSTRUCTION M. F. Peterson, Superintendent Bismarck, North Dakota

SPECIAL EDUCATION REPORT

Date	County
Fall Report - Due December	
KEY: SC - Speech Correction EMH - Classes for Educable Mentall Handicapped	1. Name (Clinician or Teacher) Address
TMH - Classes for Trainable Mental Handicapped HH - Home and Hospital Teaching Ph.H - Classes for Physically	
Handicapped VC - Visiting Counselor Sum. Sp Summer Speech Clinic	Kind of Service
CED - Classes for Emotionally Disturbed	(Circle one) SC EMH TMH HH Ph.H VC Sum. Sp. CED B HI
B - Resource Teacher for Blind HI - Classes for Hearing Impaired	Number Enrolled Currently
2. Outline briefly either weekly	speech correction plan or daily class schedule:
3. Is teacher's or clinician's t	ransportation paid? At what rate?
4. Record of state-owned equipme	ent:
Audiometer: Name	Serial No
	Serial No
SignedPerson Making Report	
Person Making Report	SCHOOL AUMITHISTRA COL

"Buy North Dakota Products"



DEPARTMENT OF PUBLIC INSTRUCTION M. F. Peterson, Superintendent Bismarck, North Dakota

REPORT ON SPEECH CORRECTION PROGRAMS IN PUBLIC SCHOOLS

Date	County
For the	1919_ School Year
I.	SPEECH CLINICIAN ADDRESS
II.	SCHOOL DISTRICT OR COUNTY
III.	ADMINISTRATOR
IV.	SCHEDULE OF SPEECH CORRECTION: (Give typical weekly schedule in blocks of time. Do not give children's names.)
	Monday Tuesday Wednesday Thursday Friday
٧.	PROGRAM: 1. Hours per week in speech correction 2. Hours per week in travel 3. Number of miles per week 4. Reimbursement rate 5. Hours per week for conferences a. teachers b. parents c. conference plan
	6. Speech improvement in primary class
	7. Number of hearing tests given (School Year) 19 - 19
	8. Number of apeech tests given 9. Case load average during the year 10. Number of children on waiting lists at year's end
	11. Number of children dismissed as corrected during the year (including those at end of year)
	during year
	14. Individual case reports are available at
	05



Form I - 8 S. Ed.

•	15.	Reports on testing done are available at
	16.	Hearing and speech screening was accomplished at beginning of school year
		Yes No During school year
		DatesTime required

VI. REPORT ON INDIVIDUALS SERVED:

On attached sheets report children who were enrolled in the speech correction program. When you have completed that list, report all children with speech defects who are on a waiting list at the end of the year. Identify the group on a waiting list by starting a new sheet and so designating.



1.	Child's		2.	3.	4.	- 5	pee	ch]	Def	ect_	: :	5•	6. Cor-	7. Left
_		School	Age	Gr.	Artic	ΗL	Cl	P	٧	Stut	CP		rected	School
	1													
								-						
								_						
									_					
<u>5.</u>									-					
6.						-		-	-					
7.									-					
8.								-	-		-			
9.		•			 	ļ	-	-	\vdash		-			
10.					-	<u> </u>	-	-	+-		1			
11.						-	-	\dagger	+-		 			
12.			-		-		-	+	-	-	-			
<u>13.</u>			-	-		-	-	+			T			
14.								+	+-	1				
15.			-					\dagger	+					
16.			-	_			+-	\dagger	1					
17.				-		_		十	T					
18.			-			-	-	+	+	+-	1			
19.								+						
20.		THE RESERVE THE PERSON NAMED IN		_		-	-	-	十		+-			
21.							-		+					
22.			-	_			+-	+	-		-			
23.			+		-			+	_		+	+	1	
24.			-			-	-	+	+	-	+-		+	
25.														

DEPARTMENT OF PUBLIC INSTRUCTION M. F. Peterson, Superintendent Bismarck, North Dakota

INSTRUCTIONS FOR COMPLETING FORM I - 8 REPORT OF SPEECH CORRECTION PROGRAMS IN THE PUBLIC SCHOOLS

- I. Speech Clinician Name and Mailing Address
- II. School District or County If you are directly responsible to a county superintendent, give county; otherwise name school district which writes your salary checks.
- III. Administrator Give name of school administrator to whom you are responsible.
 - IV. Schedule of Speech Correction List general weekly schedule.

V. Program -

- 1. Hours per week of speech correction Give number of actual speech correction hours scheduled weekly.
- 2. Hours per week of travel Give approximate travel time necessary each week.
- 3. Number of miles per week. Travel between speech correction centers and central point.
- 4. Reimbursement rate Indicate how you are paid and at what 'ate.
- 5. Hours per week for conferences Indicate approximate hours per week used for teacher and parent conferences. Under C give any special conference time during or at end of school year set aside for parent conferences.
- 6. Speech Improvement in Primary Class If you go into primary classes and demonstrate speech improvement or conduct speech improvement classes with a total grade, indicate time used per week or during year and so designate.
- 7. Number of hearing tests given during school year.
- 8. Number of speech tests given during school year.
- 9. Case load average during year Give number of children scheduled during a regular week.
- 10. Number of children on waiting list at year's end Indicate number of children needing speech correction who have not been scheduled because of lack of time.
- 11. Number of children dismissed as corrected during the year Include all children who have been dismissed from speech correction, including those to be dismissed at end of school year. Do not include children who will return for follow-up in the fall or who have left the school or community.
- 12. Total number of children included in speech correction during the year This will be the sum of the children dismissed as corrected, those remaining from this year's case load, and those children who received
 speech correction for a portion of the year but who left the school or
 community.
- 13. Did each child receive at least one-half hour speech correction each week?



15. Testing reports are available at_____

- Give name of school or office where these are available.

16. Hearing and speech screening was accomplished at beginning of school year Yes No - Check one. If during school year check appropriately. After dates indicate time required and dates of beginning and ending.

VI. Report on Individuals Served -

1. Child's name.

2. Child's age on September 1, beginning of school.

3. Grade room in which child is enrolled.

- 4. Speech defect Indicate the central or most severe speech defect (i.e., if a child has articulation defect due to hearing loss, check only hearing loss, etc.) Hearing loss Check this column when speech defect is directly related to hearing impairment. Cleft lip or palate Check this column if speech defect is directly related to cleft lip and/or palate. Voice Check this column if major speech defect is voice disorder. Stuttering Check this column if there is noticeable non-fluency in speech. Cerebral Palsy Check this column if the speech defect seems to be directly related to a previously diagnosed condition of impairment to the central nervous system. Note: Check more than one column whenever necessary to describe the speech defect requiring speech correction either at present or in the future.
- 5. If the child will require more speech correction next year, check this column.
- 6. If the child will not need additional speech correction, check here.
- 7. If the child is no longer enrolled in the school, check here.

(The clinician will complete four copies of this report and file two with the sponsoring superintendent and one with the Director of Special Education, Department of Public Instruction, Bismarck, and retain one for special education files.)



ERIC Proided by ERIC

Form V

DEPARTMENT OF PUBLIC INSTRUCTION

Total Reimbursement Claim (Individual Instruction Programs) County, State of North Dakota, on this Form \$ School Board, who after being ဌ ಭ 2 ဍ Amount @ \$2.00 - Claim Claim Claim Claim Starting date_ Starting Date Date Starting Date ETC. Position_ Number ř Starting **©** \$2.00 -@ \$2.00 -AMOUNT CLAIMED FOR SPECIAL EDUCATION CLASS UNITS, SERVICES, INDIVIDUAL INSTRUCTION, A. Classes (Number X \$)

B. Homebound or hospitalized pupils (Individual @ \$5·00 personally appeared claim are that the facts set forth in this claim are trueduly sworn according to law, made oath that the facts set forth in this claim are trueduly sworn according to law, made oath that the facts set forth in this claim are trueduly sworn according to law, made oath that the facts set forth in this claim are trueduly sworn according to law, made oath that the facts set forth in this claim are trueduly sworn according to law, made oath that the facts set forth in this claim are truedulated and the facts set forth in this claim are truedulated and the facts set forth in this claim are truedulated and the facts set forth in this claim are truedulated and the facts set forth in this claim are truedulated and the facts set forth in this claim are truedulated and the facts are truedulated and truedulated and the facts are truedulated and tru Notary Public IV. ADDRESS REIMBURSEMENT CLAIM FOR SPECIAL EDUCATION Total hours of instruction Child's Name Total hours of instruction Total hours of instruction Child's Name Total hours of instruction Total (Individual Instruction) Bus APPLICATION: M. F. Peterson, Superintendent For The 19 - 19 School Year , α, Bismarck, North Dakota Address III, COUNTY 13, a Notary Public in and for 1. Child's Name_ Child's Name THIS Clerk of the Number Date Amount Signature of Clerk of School Board NAME OF SCHOOL DISTRICT
NAMES OF SPECIAL EDUCATION PERSONNEL PERTINENT TO
1.
2.
3.
4. 4. તં Group Ā C. Total (above)
VII. TRANSPORTATION REIMBURSEMENT:
B. Individual 1. Name Directors of Special Ed. School Psychologists Visiting Counselors Classes (Number Speech Clinicians Application for ë Total Ap-AFFIDAVIT proved Other Reimbursement Date of Before VIII. VI. -100OPERATING INSTRUCTIONS

Melody Master Ideal Auditory Training Amplifier

Model P-1 Special

This unit was specifically designed to assist the speech therapist and correctionist. Its area of usefulness embraces every area and phase of speech work even in those instances where there is no hearing loss. Other workers in the field of applied psychology are finding it most useful.

The quality of sound is most important. To get familiar with everyoperation try the Unit yourself listening to your voice, the voices of others and you can readily see how to meet the requirements of your listener. The clear, distinct and NATURAL sound lengthens the interest span and speeds results.

HOW TO PREPARE FOR OPERATION:

The two microphones and bases, one set low impedence dynamic headphones and the power cord are packed into the compartment on the left.

- 1. Turn all controls gently to the left as far as they will go.
- 2. Plug the expansion type electrical plug into nearest 110-115 volt AC power supply.
- 3. Turn MASTER VOLUME clockwise slowly until a slight click is heard and the pilot light is lit.
- 4. Plug headphones into jack marked PHONES.
- 5. Plug microphone with <u>dual</u> tips into proper receptacle and tighten collar.

 The Unit may be used with this microphone attached. Then attach other microphone holding upper portion of connector while tightening down collar. If this connection is made without holding the wire inside this connector may be twisted off and microphone will be inoperative. Turn microphone switch to ON position.
- 6. Place headphones on listener. Note that one phone has a cord with a RED tracer while the oth has a GREEN tracer. Speaking into the microphone from a distance of about six inches gently advance the MASTER VOLUME until the listener indicates awareness of sound in one ear (phone with RED tracer). Make any desired adjustment for better perception and discrimination and a comfortable listening level. Reverse phones and make the same test on other ear. Then place phone with RED tracer on poorer ear and bring up BINAURAL control until there is balance. When this control is on FULL the sound pressure in both ears is identical if half way then sound in the phone with GREEN tracer is one half the setting of the MASTER VOLUME.



Operating Instructions (continued)

Please note: As an average, the first five numbers will average between 8 and 10 db above threshold for the first entire five (5) numbers. From this point to the top the average is from 13 to 15 db per number.

When ou have found a comfortable listening level you are ready to start instruction using your own methodology. Suggesting that the listener repeat into the microphone speeds instruction since the memory span is short and the effect of handling a microphone back and forth causes too much distraction.

Send to the address below for repairs:

Sherwood Electronics Inc. 4300 N. California Ave. Chicago 18, Illinois 60600

Identify your instrument and pack it well when you send it.



Care of Geloso Tape Recorders Model G-255-S

Preliminary Instructions

Before attempting to use your Geloso tape recorder, take a few minutes to familiarize yourself with the various controls, as identified in the accompanying illustrations. DO NOT as yet plug the line cord into a power outlet.

The transparent plastic dust cover, is hinged at its left end. To raise it, lift with the index finger of your right hand, placed against the corner where the volume control knob is located. The cover will come to rest to the left, out of the way of the tape reels. When it is lowered, it protects the latter but does not interfere with the operation of the controls.

Voltage Adjustment

On the under side of the recorder, accessible through an opening in the cabinet, is a voltage adjustment strip. A removable two-prong shorting link can be inserted into holes marked 110, 125, 140, 160 and 220, representing voltage values. When the recorders leave the factory, the link is placed in the 110-volt position. This is satisfactory for the standard line voltage range of 110 to 117 volts used in most of the United States. The other positions can be used to satisfy unusual line voltage conditions.

Tape Speeds and Playing Times. Model G-255-S

The Model G-255-S recorder uses 3-inch or 3\frac{1}{4}-inch reels of standard \frac{1}{4}-inch wide recording tape. By means of the tape speech adjustment (the small knob between the reels), the machine can be run at either 3-3/4 inch of tape per second or 1-7/8 inch. The higher speed gives better tone quality for the recording of music, and is recommended for general use. The lower speed is entirely satisfactory for the recording of speech, dictation and recording of telephone conversations; and has the advantage of doubled playing time. Dual-track recording is used at both speeds; that is, only the upper half of the tape is used when a reel is run through initially, and then the other half is used when the reel is turned over and run through a second time.

The total recording time at 3-3/4 inch per second is 30 minutes with normal tape and 45 minutes with thin tape; at 1-7/8 inch per second, it is an hour with normal tape and an hour and 30 minutes with thin tape. These figures are only approximate. The machine is set for the 3-3/4 inch rate when the red dot of the tape speed adjustment faces the vertical index line, and for the 1-7/8 inch rate when the knob is turned counterclockwise to bring the white dot forward.



Loading the Reels

There are two methods for loading the reels recorder:

1st Method

- l place the reel for recording or playback (i.e. the full reel) onto the left drive shaft and the empty reel onto the right drive shaft, making sure that the nicks of the reel slip completely onto the guide ledges of the drive shafts.
- 2 with the thumb of the left hand hold pressed completely to the left side advance lever in front of the set.
- 3 with the other hand, thread the tape into the slot of the recording head and between the two drive rollers.
 - 4 attach the tape to the empty reel at the right-hand side.
- 5 turn this reel by hand for two or three complete revolutions, always pressing the lever at the front of the set completely to the left.

2nd Method

- 6 press the yellow push-button. (This action frees the slot of the recording head and opens the two drive rollers.)
- ?... if the recorder is on, turn speed selector switch to neutral (position between the red and the white dot).
- 8 clace the full reel for play-back or recording onto the left drive shaft, and the empty reel unto the right drive shaft, making sure that the nicks of the reels slip completely onto the guide ledges of the drive shafts.
- 9 thread the tape into the slot of the recording head and between the two drive rollers.
 - 10 attach the tape to the empty reel at the right-hand side.

Turn this reel by hand for two or three complete revolutions.

Press the black push-button and, thereafter, turn the speed selector switch into the desired position.

- 11 drop the transparent dust cover.
- 12 insert the plug of the Geleso microphone firmly into the jack on the back of the recorder marked (Micro).



Loading the Reels (continued)

- 13 turn the recorder on by rotating the volume control knob clockwise. Bring the index line on the knob to the red spot on the transparent cover; this is a good average setting. In a few seconds the indicator light will glow a faint green.
- 14 hold the microphone 6 or 8 inches from your mouth, press the red (Record) button, and start talking in a normal tone. Watch the indicator light. If it flickers as you talk, the volume control setting is about correct. If it doesn't flicker at all, it is too low. If it flickers out, the setting is too high or you are talking too loudly. Don't hesitate to experiment, as the tape can be used over and over.
- 15 you can stop the recording at any time by pressing the black (stop) button. This arrests the tape movement, but keeps the recorder circuits alive. To resume, again press the red (Record) button.

Listening

To hear what you have recorded, press the yellow (Rewind) button, and instantly the reels will reverse and the tape will rewind itself on the feed reel at a rapid rate. Watch the right-hand take-up reel, and before the tape runs off it, press down quickly on the green (Play) button. The rewinding action will stop instantly, the tape will go forward at its regular rate, and your voice will issue from the loud speaker. Control the volume as desired.

Most people cannot recognize their own voices the first time they hear a play-back. Their usual reaction is, "Don't tell me that's how I sound".

Push button and Rapid Advance Controls

The interlocking design of the push-button controls makes it impossible to cause any damage to the tape. You can press one after the other, and instantly one function is cut off and another started. The black (stop) button brings the recorder to a dead halt regardless of which other botton was down previously.

When the green (Play) button is down, pushing the rapid advance lever to the left speeds up the tape. This is most useful when you want to reach a certain section of a recording without having to listen to everything proceding it.



Loading the Reels (continued)

Note that the tape is ready for instant playback after it has been rewound. No processing of any kind is required. Also, tape is reusable indefinitely. If you don't like what's on it, merely run it through and repeat the recording operation.

Previous recordings are wiped off electronically before the new speech or misic goes on.

Dual tracking

To make full use of both edges of the recording tape, press the black (stop) button before the tape rewinds completely from the left-hand spool. Turn the machine off, and press the yellow (Rewind) button to open the recording head and the drive rollers. Now simply flop the reels, so that the full one is on the left and the empty one on the right.

Be especially careful not to twist the tape; the shany side must face toward you. Now proceed as if you are starting with a fresh reel.

Lubrication

Lubrication of motor must be done sparingly - two small drops of oil once a year. This is best done by an electrician. Service in North Dakota is maintained by Wolter Electronics, 716 1st Ave. N., Fargo, North Dakota.



OPERATING INSTRUCTIONS for the MAICO MODEL MA-2 AUDIOMETER

GENERAL DESCRIPTION

The Maico MA-2 AUDIOMETER is an instrument designed especially for use by schools, institutions, public health authorities, industry and business where a light-weight, portable audiometer is required. It has simple, easy to operate controls and is built into a company carrying case of modern design. A storage compartment for accessories is provided at the rear of the carrying case.

Among the outstanding features of this instrument are: sidemounted frequency and H-L controls, dual tone interruptors; twin air-conduction receivers; combined mic and tone interruptor reversal switch; calibrated masking tone circuit; automatic output limiting action; calibrated bone conduction circuit; an extra output jack for multiple group equipment; and speech circuit for communication.

Frequencies of 125, 250, 500, 750, 1000, 1500, 2000, 3000, 4000 6000 and 8000 cycles are provided, with an accuracy of better than 5% when calibrated. The attenuator or hearing level control is graduated in steps of five decibels and measures hearing levels from 0 to 110 db.

SETTING UP THE AUDIOMETER

The MODEL MA-2 AUDIOMETER is a precision electronic instrument and should be handled with care at all times. Receivers and accessories deserve careful handling. Changes in calibration caused by rough treatment of receivers are far more frequent than those due to failure of the audiometer itself.

Unpacking - Upon receipt of the audiometer, pause before opening the packing box to examine it for exterior signs of damage or rough handling while in transit. If the box has been damaged, notify transit agent immediately and also your nearest MAICO distributor. If the shipment seems to be in good condition, the audiometer should be carefully unpacked. Examine the audiometer for concealed transit damage. If damage is noted, notify transit agent immediately.

Model MA-2 Audiometer Accessories

- 1. Headset with two air-conduction receivers
- 2. Audiograms



Optional Accessories

- 1. Bone conduction vibrator (may be used with headband)
- 2. Hand microphone
- 3. Group test equipment

Proper Voltage - The MODEL MA-2 AUDIOMETER is designed to operate on 105-125 volts, 50-60 cycle alternating current. The unit is so designed that there will be no significant variation in output calibration of the audiometer with line voltage variations as great as 10%.

CAUTION

DO NOT. UNDER ANY CIRCUMSTANCES, OPERATE THE AUDIOMETER ON DIRECT

CURRENT OR 220 VOLTS, A.C.

CHECKING OPERATION OF THE AUDIOMETER

After setting up the audiometer and connecting it to a proper power source, the operator should proceed to check the controls on the front panel.

The following instructions describe each control and its normal function.

- 1. Power Switch located in the lower right hand corner, is used to turn on and off the power supply to the instrument. With this switch in the "ON" position, the hearing loss and frequency selector indicator windows on the front panel should light up. If they do not, check connection to electrical outlet to make sure it is properly connected to a "live" line. Also check the audiometer fuse, located in the accessory storage compartment, adjacent to the group equipment jack. A spare fuse is provided in a clip near fuse holder.
- 2. Output Selector located in the lower left center of the front panel, is used to select the type of test to be applied and the receiver to which it is applied. In the extreme left or "group" position, the output of the audiometer is applied to the multiple outlet for group testing. In the left-center or "blue" position, the output is applied to the air-conduction receiver with the blue cap. The right-center or "red" position delivers output on the air-conduction receiver with the red cap. The extreme right position delivers output to the bone-conduction vibrator.
- 3. <u>Dual Tone Interruptors</u> located in the lower left and lower right sides of the panel, interrupt the audible signal. Either tone interruptor may be used to determine whether subject actually hears the tone.



4. Tone-Mic Switch - located at lower left of the instrument panel is used to transfer from pure tone testing to speech communication circuit and also serves as a tone interruptor reversal switch. The circuit design permits the use of the speech amplifier for communication purposes only. Approximately 30 to 40 db of acoustical gain is available.

Since the output limiting takes place in the Hearing Level Control electrical circuit, the speech acoustic power produced by the air receiver, will vary for a given Hearing Level Control setting as the Frequency Selector is switched thru the Audiometer frequency range.

Below are listed the Frequency Selector and Hearing Level settings which will permit meximum speech sound level in the air receivers:

Frequency Selector	Hearing Level in db
125 250, 6000, 8000 750, 1000, 1500, 2000 3000, 4000	80db 90db 110db

At each of the above Hearing Level settings, the speech acoustic output is the same (approximately 90 db above .0002 dynes/cm2). However, it should be noted that at a given Hearing Level setting, e.g. 60 db the speech acoustic output level will vary with the Frequency Selector setting.

In the extreme left or "Rev" position, it delivers the pure tone signal only when one of the tone interruptors is depressed. In the center or "Norm" position, it delivers pure tone when there is no pressure on tone interruptors. Pure tone is then interrupted by depressing one of tone interruptors. The preferred method of testing is with the tone normally "off".

- 5. Masking Control located in right center of panel, is used to regulate the intensity of the masking tone and is calibrated from OFF to 90db. When it is turned on, a masking tone will be delivered. Thus, with the Output Selector in the "Red" position, a masking tone will be applied to the blue receiver. This feature permits the operator to mask either ear of the subject while the other ear is being tested with pure tone.
- 6. Frequency Selector located at right of control panel, is used for selection of the desired frequency for pure tone testing. It is calibrated in octave steps from 125 to 8000 cycles and in intermediate frequencies of 750, 1500, 3000, and 6000 cycles. Small figures indicate the maximum calibrated output level at indicated frequency. Limits for Air Conduction are perfixed by the letter "A", those for Bone Conduction by the letter "B". Where no small figures appear, the maximum level is 110 db.

7. Hearing Level Control - located at left of control panel, is used to vary the intensity of the signal in decibels for both air and bone conduction. Intensity steps are 5 db each. Loss of hearing in decibels is indicated by the setting of this dial.

CARE AND SERVICE

Your MAICO AUDIOMETER is a precision instrument and deserves to be treated as such. The care and handling which you accord it will determine its continued accuracy and service. Be sure that you use it at the proper voltage. Do not drop or mishandle either the audiometer itself or the receivers. Keeping the accessories in the storage compartment provided in the top of the instrument's carrying case will minimize the possibility of accidental damage.

Accessories - Connecting cords of the receivers should never be pulled or jerked and should be examined regularly for signs of a worn cord or breakage. A broken or weak cord can cause cracking noises or intermittent or weak operation and should be promptly replaced. It is possible to replace cords of either air or bone conduction receivers without returning the receiver itself to the laboratory.

Fuse - Adjacent to the Multiple Outlet Jack in the accessory storage compartment, there is a small black fuse case. This fuse protects the unit against improper voltage. Should the audiometer become inoperative and the dial lights fail to light up, remove the fuse by unscrewing the plastic fuseholder cover. Examine to see if the fuse wire in the glass tube is broken or burned out. If so, remove the fuse from its holder and replace with another .25 ampere type 3AG fuse (Spare provided.)

Dial Light - The small dial light is mounted behind the Frequency and Hearing Level dials in a bayonet type socket secured to the main chassis. The lamp is a 6-8 volt bayonet base type - number 47. To replace this lamp, the two screws in the bottom of the cabinet and the four wood screws olding the curved front panels must be removed. Unplug the accessories and pull the chassis forward out of the cabinet and install the dial lamp.

Vacuum Tubes - The tubes used in the MA-2 AUDIOMETER are:

1 - 6AU8

1 - 6AQ5

Recalibration is recommended after weak or burned out tubes are replaced, although tube changes will normally cause less than 3 db calibration error.



Wear on Audiometer

Most of the wear on an audiometer occurs when the instrument is turned on initially. When this is done, energy surges through the circuit and its components causing wear on them. This wear on the parts can be overcome in part and if the audiometer will be left on for the remainder of the day after the initial warming up of the audiometer. Unless there is no possibility that the instrument will be used again the same day the audiometer should remain on. (It is this wearing out of the components of the audiometer that cause, in part, the audiometer to be out of calibration.)

Servicing Locally - Because the MAICO audiometer is not a radio circuit but a special audio-frequency device with special coils, transformers, circuits, and transducers designed for its particular purpose, it is outside the field of the radio service man. Experience has shown that attempts to service these units without delicate electronic instruments, artificial ears, and other laboratory equipment required generally necessitiates more extensive laboratory service later on.

When an audiometer has been in use to such an extent that a vital part or parts may have worn out and need replacement, merely replacing the part or part, to make the unit operative again is not enough. The unit should also be recalibrated so that it is not only operative but entirely accurate. Readings obtained from ordinary radio service instruments bear no relationships to the proper calibration of the audiometer.

Recalibration - The audiometer should have a laboratory recalibration at least once every two years, the exact period depending on how the instrument and its accessories are handled. When you first receive the audiometer, it is advisable to make several careful tests on your own ears and on those of several young adults on whom you will be able to make subsequent retests. Should you feel at any later date that the calibration of the instrument may have become inaccurate, proceed immediately to make retests on yourself and the others on whom you made records when you first received the instrument. Should all of these show changes in the same direction at the same points, it would indicate that the calibration has changed. The audiometer should then be returned to the laboratory for recalibration. The air conduction receiver is always calibrated to a specific audiometer and must be returned to the laboratory with its audiometer.

Laboratory Repair - Be sure to call on your nearest MAICO distributor for any assistance you may need with your audiometer. Give him full and complete details of the difficulty or complaint and have him examine the instrument before returning it. In many instances the trouble can be cleared up satisfactorily without returning the instrument.



Laboratory Repair (continued)

Your distributor can tell you whether best service can be had by returning the instrument to our main laboratory in Minneapolis or one of several strategically located service laboratories.

If it is necessary for you to return the instrument, it should be packed with care in its original shipping carton or if this is not available, in a strong wooden box with at least two inches of clearance on every side of the audiometer. The following steps should br taken in packing:

- 1. Wrap the air and bone conduction receivers with care in several layers of soft paper and pack securely in accessory compartment.
- Wrap the audiometer in paper, covering it first with tissue or soft paper and second with a strong paper. Use tape or string to secure this wrapping.
- 3. Place several layers of shredded paper in bottom of box. Place wrapped audiometer in box and fill in with more shredded paper around sides and ends.
- 4. Place more shredded paper on top and nail top on box.
- 5. Be sure to address plainly with label on both top and side of box to: THE MAICO CO, INC., 21 North Third St., Minneapolis 1, Minn. Show the return address (your own) and exact contents of box and serial number of audiometer on outside of box.
- 6. Insure shipment properly and ship by EXPRESS PREPAID (Not Parcel Post.)



Helps for the Teachers and Parents of Hard of Hearing Children

DOES YOUR CHILD LIVE BY HIMSELF?

Even though your child receives an audiometric hearing test periodically in school, you should be familiar with the following conditions which may indicate a hearing loss. Observe your child closely following his recovery from any severe cold or infectious disease, since colds are often complicated by ear trouble and some degree of hearing loss. (Check any of the following conditions that you have noticed in your child.)

()Making poor progress in school. ()Turning one side of head toward speaker or source of sound. ()Retarded in developing language. ()Inability to follow directions. ()Asking for repetition of words or phrases. ()Inattention to what others say. ()Tenderness, pain, deformities, or ()Dizziness, buzzing, or ringing swelling in or about the ear. in the ears. ()Having the ability to read lips ()Failure to respond when called. without training. ()History of deafness in family. ()Mouth breathing. ()Failure to locate source of ()Misunderstanding conversation sound. of others. ()Substitution of one sound for ()Incorrect answering of quesanother. tic ~ ()Hearing better than others in a noisy place.

BETTER HEARING FOR BETTER LIVING?

GOOD HEARING influences general health, school progress, and social and emotional adjustment. However, 3,000,000 school children in the United States, or one out of every ten, are handicapped by some impairment in hearing.

COOPERATION between the school and home is essential in order to find children who have hearing losses. Early discovery and treatment may prevent serious loss of hearing in some cases, forestall further loss in others, and in many cases decrease or eliminate the hearing deficiency. No child should be deprived of his right to hear. Good hearing is essential for happiness as well as success in school.



GOOD HEARING AIDS SCHOOL PROGRESS

IN order to help a child achieve a happy useful life, both you and your child must work together. You must also cooperate with the child's teacher for a hearing conservation program in his school.

WHAT THE TEACHER CAN DO:

REVIEW the child's health record for history of familial deafness and infectious disease.

STUDY achievement records. Poor of failing work may be caused by defective hearing.

INCLUDE in your health education program a unit on the care of the ear.

REFORT a child suspected of having a hearing loss to the principal who should refer him to the proper person for an audiometric test.

USE a well modulated tone of voice and distinct speech. Avoid exaggerated lip movements.

PROVIDE adequate lighting in the classroom.

SEE that the person speaking is facing the light so that the child can lip read.

PLACE any hard of hearing pupil in the front of the classroom where he will have a better opportunity to hear.

TEACH the child to watch the face of the speaker.

KEEP the hard of hearing child speech conscious so that he can develop a pleasant voice.

FOLLOW instructions of the physician and of the special education teacher if they recommend an educational program.

WHAT THE

PARENT

CAN DO:

GUARD your child's health by providing the essential foods, plenty of rest, and sleep.

WATCH your child when he is ill. Measles, scarlet fever, and frequent colds may affect the ears.

FOLLOW your physician's advice. Consult a specialist if your physician so advises.

STUDY school reports. Poor grades may be the result of failure to hear. If the child's work is not satisfactory in any subject, try to discover the cause.

COOPERATE with the nurse and teacher when they advise you that your child needs medical care or special educational help.

Copied from a Reprint by
Maico Electronics, Inc.
21 North 3rd Street
Minneapolis 1, Minneapolis
Courtesy Ohio Department of Health



Helps for the Teachers and Parents of Hard of Hearing Children

HE LISTENS ---- with his EYES and his EARS

Statistically there are two children with hearing impairments in each classroom of thirty. Do you know any in your room?

Help the child who is hard of hearing in the classroom by...letting the child see and listen at the same time.

I. SHORT CUT SUGGESTIONS:

- When he sees the back of your head he does not see your eyes and
- B. An outline in the window makes you an outline. He can't see your lips.
- C. Mouthing (exaggerated lip movement) doesn't help the child lip read; your funny faces merely confuse him.
- D. It is impossible to see through your hand, or a book in front of your face.
- E. It helps to have recitations and discussions in the front of the room.
- F. Rhythmic activities are fun, helpful to the hearing impaired and enjoyed by all the class.
- G. Accept him as a child...don't let his impairment "throw-you."
- H. Change the pace of the activities, constant lip reading is tiring.
- I. Flexibility in seating arrangement, movable desks, table and group arrangements enable the child to watch.
- J. Be patient with his hearing-aid, it has to become a part of the child.

EDUCATIONAL HELPS: II.

- A. Watch to see that he understands spelling words, assignments, etc.
- B. Encourage an active interest in the expressional activities ... reading, conversation, creative dramatics, etc.
- C. Teach the use of the dictionary to aid his pronunciation.
- D. Improve reading and speech through basic phonetics.
- E. Expect him to use good speech and complete sentences.

III. GENERAL HELPS:

- A, Enrich his environmental experiences. (The visit to the zoo can help vocabulary development).
- B. Give him an opportunity to be a leader.
- C. Help him during the difficult time of changing classes, teachers, or schools.
- D. Be truthful about the child's achievement, leniency is not helping him.
- E. Build confidence in you to aid him in reporting his difficulties and to keep him from withdrawing.
- F. Expect from him what you expect from other children, socially and physically his age and mental level.

Copy of Special Education Leaflet No. 4, Issued by Vernon L. Nickell, Superintendent Office of Public Instruction, Springfield, Illinois





Speech Improvement in the Schools

Many times speech clinicians are encouraged by principals and teachers to include children in the speech correction case-load whose speech deviations may be the natural developmental irregularities of immaturity. Children with minor pronunciation errors which result from bi-lingualism may also cause concern in the classroom and may be referred to the speech clinician. Because these defects are more correctly modified in the general speech improvement activities of a regular classroom than in speech correction, some discussion of speech improvement scemed warranted in this manual.

A number of investigations have been completed or are underway in the area of speech improvement. One of these, conducted by Dr. Margaret Byrne, Director, Speech and Hearing Clinic, University of Kansas, Lawrence, is discussed in detail in The Child Speaks - A Syllabus for Improvement and Correction, referred to later in the bibliography with this article. Dr. Byrne has given her permission for the following materials to be reproduced. There is suggested a way of encouraging teachers to incorporate some speech improvement activities into the classroom which will systematically help children to develop improved speech patterns during the first and second grades. Those children who have persistent sound substitutions, omissions and distortions will need speech correction from the speech clinician.

Speech Improvement in the Schools (continuea)

"One goal of the language arts program for elementary school children is the development of normal patterns of oral communication. Articulation of speech sounds is an aspect of communication that has received considerable attention. Since the child must use the sounds of our language correctly if his ideas are to be understood by the listener, classroom teachers have been encouraged to refer the child with deviate articulation to the speech clinician for appropriate remedial work. The cooperation of teachers and clinicians has resulted in widespread interest in special programs designed to foster normal articulation and more effective communication in young children.

Because of my interest and that of teachers, clinicians, and administrators a Speech Improvement Project* was initiated in 1959 to determine the influence of a specific approach to speech learning on articulation, discrimination, and reading skills. The program was carried out by kindergarten and first grade teachers who volunteered as participants. The experimental teachers were randomly selected from schools which had been classified as high, middle, or low in socio-economic status; and within the same three levels control teachers were likewise designated. Of the 56 groups, which were intact classrooms, 40 were in the Wichita and 16 in the Lawrence, Kansas, Public School Systems. Although the speech improvement training was provided for only one year, the children were followed in a testing program for a three-year period.



^{*}Development and Evaluation of a Speech Improvement Program for Kindergarten and First Grade Children. Project 620 (8255), U.S. Office of Education, 1959-62.

Speech Improvement in the Schools (continued)

In order to carry out this program the teachers were given in-service training and were visited by the Project Director while they conducted the speech improvement lessons. A detailed syllabus had been prepared for them and all the materials to be used with the lessons were given to them. The teachers began the program November 1 and had covered all of the lessons about April 15. During the last weeks of the semester they reviewed those sounds that seemed most difficult for the children.

On the following pages you will find an outline of the general goals and activities for the sounds, the sounds that were taught, some of the speech results of the program and a list of references and materials for speech improvement programming.

Outline of the Daily Goals and General Activities for Each Sound

- First Day I. Introducing the sound
 - A. Association of the sound with the name of an animal and/or a familiar object.
 - B. Words in which we find it
 - 1. Identification of children whose names have the sound in them
 - 2. Objects or animals that make the sound
 - 3. Names of colors, objects in the room, or numbers with the sound
 - C. General idea of how the sound is made
- Second Day II. Listening for the sound
 - A. A story which stresses vocabulary that requires the sound of the week
 - B. Questions based on the story or other activities that require answers which utilize the sound of the week
- Third Day III. Discriminating between the new sound and other sounds
 - A. Picture materials which require children to determine whether or not the sound of the week is present in the names of the pictures



Speech Improvement in the Schools (continued)

Fourth Day IV. Producing the correct sound in isolation and in words

A. Action Games

B. Stories

C. Activities

Fifth Day V. Sharing time---carry-over of correct sound production in Show and Tell Time

A. Utilization by the children of a key phrase which includes the sound of the week

*More than one week can be spent on each sound, depending upon the speech needs of the children and the number of activities utilized.

Order of Presentation of Sounds

Unit 1	Central Theme Sounds around us	Identifying Object
2	p sound	Pig
2 3 4 5 6	k sound	Captain Kangaroo
4	s sound	Timmy Teakettle
5	z sound	Buzzing Bee
	Review of p,k,s,z	
7 8 9	g sound	Grey Goose
8	sh sound	Seashell
	1 sound	Telephone
10	f sound	Funny Face
11	Review of g, sh, l, f	-
12	v sound	Valentine
13	ch sound	Choo-choo-Train
14	j sound	Jack-in-the-Box
15	r sound	Rooster
16	Review of v,ch,j,r	
17	voiced th sound	Airplane
18	unvoiced th sound	Thumper
19	Review of entire prog	gram

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Zedler, Empress

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<u>Listening</u> <u>for Speech Sounds</u>, Carden City, New York: Doubleday and Company. 1955

<u>Materials</u>

Listening Time Records

Albums I, II, and III. Each Album-\$5.95. (Speech stories with musical accompaniment. Aid to relaxation and listening habits.) Webster Publishing Company.

San Comment

Talking Time Filmstrips

Webster Publishing Company, \$5.00 each.

Telling Stories See-Quees

Series 12. Minneapolis, Minnesota: Judy Company.

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